# R.V.R.

## GENERAL CATALOGUE

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2 — **FM TRANSMITTERS**
EXCITERS / COMPACT TRANSMITTERS

3 — **BLUES-NV** SERIES

7 — **TEX-LCD** SERIES

12 — **TEX-TFT** SERIES

17 — **PTX-LCD** SERIES

22 — **PTX-LCDDSP** SERIES

27 — **PTX-DDS** SERIES

32 — **DIGITAL RADIO TRANSMITTERS**
DAB+ /DMB DIGITAL RADIO

33 — **DRT** SERIES

40 — **FM STATIONS**
AIR COOLED STATIONS AND TRANSMITTING SYSTEMS

41 — **MODULAR** SERIES

47 — **PLUG-IN** SERIES

53 — **PLUG-IN NEXT GEN** SERIES

60 — **REDUNDANT TRANSMITTERS SYSTEM**

64 — **FM AMPLIFIERS**
BROADBAND AIR COOLED AMPLIFIERS

65 — **PJ-LIGHT - PJ-LCD** SERIES

70 — **PJ-PLUG-IN** SERIES

74 — **RADIO LINKS**
RADIO LINKS SYSTEM

75 — **PTRL - RXRL**

80 — **STATIONS ACCESSORIES**

81 — **CHANGEOVER UNITS SYSTEM**
SCM

87 — **CHANGEOVER ACCESSORIES**
AUD-SCM-RDS

92 — **RDS & AUDIO EQUIPMENTS**
AUD-RDS

97 — **GPS RECEIVER**
GPSRXNV

102 — **DUMMY LOADS**
EDL-FM

107 — **TELEMETRY SYSTEM**
TLK- / TLW-E

# FM TRANSMITTERS

EXCITERS / COMPACT TRANSMITTERS

- **Globally recognized as the most sold professional exciter.**
- **Excellent as exciter in modular systems or as a compact transmitter.**
- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **10% - 100% Output Power continuously adjustable.**
- **Fold-back control for effective "VSRW" protection.**
- **Includes IAMLC: Intelligent Automatic Modulation Level Control.**
- **Built-in high-performance stereo coder.**
- **Analogue Inputs: Analogue Stereo L&R, Mono, MPX.**
- **Digital Inputs: AES/EBU, S/PDIF, TOSLINK.**
- **Auxiliary input for SCA / RDS signals.**
- **WEB, SNMP2, GSM, Serial remote controls (option).**

# **BLUES-NV** SERIES

## ULTRA COMPACT

from 30W to 50W

MODELS

## BLUES30NV BLUES50NV



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**The Blues Series fits all needs for low-power Stations being one of the most used ultra-compact units ever. The models available reflects all R.V.R. high-standards combined in a smaller design allowing to lower any type of shipping and installation procedures. These FM Transmitters are ideal for as reperaters, exciters or compact transmitters for Community Radios.**

- **Ideal for LPFM Stations as transmitter, repeater or exciter.**
- **Great compromise between cost vs. quality.**
- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **10% - 100% Output Power continuously adjustable.**
- **Inputs: Analogue Stereo L&R, Mono, MPX. AES/EBU (option).**
- **Remotable via Web, Serial protocols (option).**
- **1 Rack unit only: ultra compact and ultra light.**
- **Universal 80-260 V multi-voltage power supply.**
- **Easy maintenance.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| BLUES30NV | **30W** Ultra Compact Stereo Transmitter. |
| BLUES50NV | **50W** Ultra Compact Stereo Transmitter. |

| OPTION | |
|---|---|
| /AESEBUBLUES | Digital/Analog converter. |
| /TLW-BLU-E | WEB and SNMP/V1 basic telemetry system via the internet. |

## BLUES30NV

**30W** Compact Stereo Transmitter.

## BLUES50NV

**50W** Compact Stereo Transmitter.



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| Parameters | | U.M. | BLUES30NV | BLUES50NV | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| **Frequency range** | | MHz | 87,5 ÷ 108 | | |
| **Rated output power** | | W | 30 | 50 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | F3E Direct carrier frequency | | |
| **Operational mode** | | | Mono, Stereo, Multiplex | | |
| **Working temperature** | | °C | -5 to + 50 | | |
| **Working humidity** | | % | 95 | | Without condensing |
| **Working altitude** | | m | Up to 2000 | | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | 10 | | Steps |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 180 Mono/MPX | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 50 (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 80 ÷ 260 | | Internal switch |
| | AC Apparent Power Consumption | VA | 120 | 200 | |
| | Active Power Consumption | W | 70 | 100 | |
| | Power Factor | | 0,5 | | |
| | Overall Efficiency | % | Typical 50 | | |
| | Connector | | VDE IEC Standard | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 44 / 3 1/2 1HE | | |
| | Overall depth | mm | 394 | | |
| | Chassis depth | mm | 372 | | |
| **Weight** | | kg | About 5,5 | | |
| **Cooling** | | | Forced, with internal fan | | |
| **Acoustic noise** | | dBA | < 58 | | |
| **AUDIO INPUTS** | | | | | |
| **Left / Mono** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -13 to +13 | | Continuosly adjustable |
| **Right** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -13 to +13 | | Continuosly adjustable |
| **MPX** | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k or 50 | | |
| | Input Level / Adjust | dBu | -13 to +13 | | For 7,5 KHz FM, adjustable |
| **SCA/RDS** | Connector | | 2 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | For 7,5 KHz FM, adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| | Input Level / Adjust | dBfs | 0 to -10 | | For 7,5 KHz FM, adjustable |
| **OUTPUTS** | | | | | |
| **RF Output** | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| **RF Monitor** | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -30 | | |
| **Pilot output** | Connector | | BNC | | |
| | Load Impedance | Ohm | >5 k | | |
| | Output Level | Vpp | 1 | | Sinusoidal |
| **FUSES** | | | | | |
| **On mains** | | | 1 External fuse F 3,15 T - 5x20 mm | 1 External fuse F 6,3 T - 5x20 mm | |
| **On services** | | | X | | |
| **On PA Supply** | | | X | | |
| **On driver supply** | | | X | | |



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40138 Bologna Italy

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sales@rvr.it - www.rvr.it

# TEX-LCD SERIES

## COMPACT HEAVY DUTY

from 30W to 3500W

MODELS

TEX30LCD/S
TEX50LCD/S
TEX100LCD/S
TEX150LCD/S
TEX300LCD
TEX502LCD
TEX702LCD
TEX3500LCD



R.V.R. Elettronica S.r.l.
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Fax +39 0516011104
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**After decades of uninterrupted success our TEX Series remains the most installed transmitter worldwide in any type of radio station.**

**Cabable of working as well under extreme conditions, the wide range of powers available, combined with high reliability and power efficiency make these models the perfect solution for those looking for high quality at a very attractive price. These compact units can be used as a stand-alone all-in-one transmitters or as exciters in modular solutions.**

- **Worldwide best seller since 1979.**
- **High quality and rock solid at unbeatable value for money.**
- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **Low distortion and intermodulation values.**
- **10% - 100% Output Power continuously adjustable.**
- **APC Automatic Power Control ensuring reliable operation.**
- **Enhanced energy saving power supply.**
- **Inputs: Analogue Stereo L&R, Mono, MPX. AES/EBU (option).**
- **Auxiliary input for SCA / RDS signals.**
- **RDS encoder with basic or advances features (option).**
- **WEB, SNMP2, GSM, Serial remote controls (option).**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TEX30LCD/S | **30W** Compact Stereo Transmitter. |
| TEX50LCD/S | **50W** Compact Stereo Transmitter. |
| TEX100LCD/S | **100W** Compact Stereo Transmitter. |
| TEX150LCD/S | **150W** Compact Stereo Transmitter. |
| TEX300LCD | **300W** Compact Stereo Transmitter. |
| TEX502LCD | **500W** Compact Stereo Transmitter. |
| TEX702LCD | **700W** Compact Stereo Transmitter. |
| TEX3500LCD | **3500W** Compact Stereo Transmitter. |

| OPTION | |
|---|---|
| /AUDIGIN-TEX | AES/EBU audio input. |
| /RDS-TEX2HE | Build-in RDS system with standard UECP 6.1 functions. |
| /RDS-TEX3HE | Build-in RDS system with standard UECP 6.1 functions. |
| /RDS-TEX-E-2HE | Build-in RDS system with standard not UECP functions. |
| /RDS-TEX-E-3HE | Build-in RDS system with standard not UECP functions. |
| /TLW-TEX-E-2HE | Basic telemetry system via the internet. |
| /TLW-TEX-E-3HE | Basic telemetry system via the internet. |
| /RTC-TEX | Weekly power events function. |
| /CNT7/16-175 | 7/16" output RF connector. |

**TEX30LCD/S**

**30W** Compact Stereo Transmitter.

**TEX100LCD/S**

**100W** Compact Stereo Transmitter.

**TEX150LCD/S**

**150W** Compact Stereo Transmitter.

**TEX300LCD**

**300W** Compact Stereo Transmitter.

**TEX702LCD**

**700W** Compact Stereo Transmitter.

**TEX3500LCD**

**3500W** Compact Stereo Transmitter.



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40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| Parameters | | U.M. | TEX30LCD/S | TEX100LCD/S | TEX150LCD/S | Notes |
|---|---|---|---|---|---|---|
| **GENERALS** | | | | | | |
| Frequency range | | MHz | 87,5 ÷ 108 | | | |
| Rated output power | | W | 30 | 100 | 150 | Continuously adjustable from 10 to 100% |
| Modulation type | | | F3E Direct carrier frequency | | | |
| Operational mode | | | Mono, Stereo, MPX | | | |
| Working temperature | | °C | -5 to + 50 | | | |
| Working humidity | | % | 95 | | | Without condensing |
| Working altitude | | m | Up to 3000 | | | With adequate air evacuation system in site |
| Frequency programmability | | kHz | 10 | | | Steps |
| Frequency stability | Working Temp. from -5°C to 50°C | ppm | ±1 | | | |
| Modulation capability | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 180 Mono/MPX | | | Meets or exceeds all FCC and CCIR rules |
| Pre-emphasis mode | | µS | 0, 50 (CCIR), 75 (FCC) | | | Selectable |
| **POWER REQUIREMENTS** | | | | | | |
| AC Power input | AC Supply Voltage | VAC | 80 ± 260% | 115 / 230 ±15% | | |
| | AC Apparent Power Consumption | VA | 130 | 330 | 440 | |
| | Active Power Consumption | W | 70 | 212 | 260 | |
| | Power Factor | | 0,6 | | | |
| | Overall Efficiency | % | Typical 50 | Typical 47 | Typical 55 | |
| | Connector | | VDE IEC Standard | | | |
| **MECHANICAL DIMENSIONS** | | | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | | |
| | Overall depth | mm | 394 | | | |
| | Chassis depth | mm | 372 | | | |
| Weight | | kg | About 6,5 | About 8,5 | | |
| Cooling | | | Forced, with internal fan | | | |
| Acoustic noise | | dBA | < 58 | | | |
| **AUDIO INPUTS** | | | | | | |
| Left / Mono | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 or 600 k | | | |
| | Input Level /Adjust | dBu | -13 to +13 | | | Continuosly adjustable |
| Right | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 or 600 k | | | |
| | Input Level | dBu | -13 to +13 | | | Continuosly adjustable |
| MPX | Connector | | BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k or 50 | | | |
| | Input Level / Adjust | dBu | -13 to +13 | | | For 7,5 KHz FM, adjustable |
| SCA/RDS | Connector | | 2 x BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k | | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | | For 7,5 KHz FM, adjustable |
| AES/EBU (optional) | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 110 | | | |
| | Input Level / Adjust | dBfs | 0 to -10 | | | For 7,5 KHz FM, adjustable |
| TOS/Link (optional) | Connector | | TOSLINk | | | |
| | Type | | Optical | | | |
| **OUTPUTS** | | | | | | |
| RF Output | Connector | | N type | | | |
| | Impedance | Ohm | 50 | | | |
| RF Monitor | Connector | | BNC | | | |
| | Impedance | Ohm | 50 | | | |
| | Output Level | dBm | Approx. -30 | Approx. -60 | | |
| Pilot output | Connector | | BNC | | | |
| | Load Impedance | Ohm | >5 k | | | |
| | Output Level | Vpp | 1 | | | Sinusoidal |
| **FUSES** | | | | | | |
| On mains | | | 1 External fuse F 3,15 T - 5x20 mm | 1 External fuse F 6,3 T - 5x20 mm | | |
| On services | | | X | | | |
| On PA Supply | | | X | | | |
| On driver supply | | | X | | | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| Parameters | | U.M. | TEX300LCD | TEX702LCD | TEX3500LCD | Notes |
|---|---|---|---|---|---|---|
| **GENERALS** | | | | | | |
| **Frequency range** | | MHz | 87,5 ÷ 108 | | | |
| **Rated output power** | | W | 300 | 700 | 3500 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | F3E Direct carrier frequency | | | |
| **Operational mode** | | | Mono, Stereo, MPX | | | |
| **Working temperature** | | °C | -5 to + 50 | | | |
| **Working humidity** | | % | 95 | | | Without condensing |
| **Working altitude** | | m | Up to 3000 | | Up to 2000 | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | 10 | | | Steps |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 180 Mono/MPX | | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 50 (CCIR), 75 (FCC) | | | Selectable |
| **POWER REQUIREMENTS** | | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 80 ÷260 | | 230 +10% -15% \| 400 +10% -15% | Monophase \| Threephases Y |
| | AC Apparent Power Consumption | VA | 560 | 912 | 4996 | |
| | Active Power Consumption | W | 520 | 910 | 4987 | |
| | Power Factor | | 0,98 | 0,998 | | |
| | Overall Efficiency | % | Typical 55 | Typical 70 | | |
| | Connector | | VDE IEC Standard | | Terminal Block | |
| **MECHANICAL DIMENSIONS** | | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | 132 / 5 1/4 3HE | |
| | Overall depth | mm | 394 | | 675 | |
| | Chassis depth | mm | 372 | | 650 | |
| **Weight** | | kg | About 9 | About 9,5 | About 29 | |
| **Cooling** | | | Forced, with internal fan | | | |
| **Acoustic noise** | | dBA | < 75 | | | |
| **AUDIO INPUTS** | | | | | | |
| **Left / Mono** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 k or 600 | | | |
| | Input Level /Adjust | dBu | -13 to +13 | | | Continuosly adjustable |
| **Right** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 k or 600 | | | |
| | Input Level | dBu | -13 to +13 | | | Continuosly adjustable |
| **MPX** | Connector | | BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k or 50 | | | |
| | Input Level / Adjust | dBu | -13 to +13 | | | For 7,5 KHz FM, adjustable |
| **SCA/RDS** | Connector | | 2 x BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k | | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | | For 7,5 KHz FM, adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 110 | | | |
| | Input Level / Adjust | dBfs | 0 to -10 | | | For 7,5 KHz FM, adjustable |
| **TOS/Link (optional)** | Connector | | TOSLINK | | | |
| | Type | | Optical | | | |
| **OUTPUTS** | | | | | | |
| **RF Output** | Connector | | N type | | 7/8" EIA | |
| | Impedance | Ohm | 50 | | | |
| **RF Monitor** | Connector | | BNC | | | |
| | Impedance | Ohm | 50 | | | |
| | Output Level | dBm | Approx. -60 | | | |
| **Pilot output** | Connector | | BNC | | | |
| | Load Impedance | Ohm | >5 k | | | |
| | Output Level | Vpp | 1 | | | Sinusoidal |
| **FUSES** | | | | | | |
| **On mains** | | | 1 External fuse F 8 L - 5x20 mm | | 3 External fuse F 10 T - 6x30 mm | |
| **On services** | | | X | | X | |
| **On PA Supply** | | | X | | 4 Internal F 32 A 10x38mm | |
| **On driver supply** | | | X | | X | |





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Fax +39 0516011104
sales@rvr.it - www.rvr.it

# TEX-TFT SERIES

## NEXT GENERATION COMPACT

from 30W to 5000W

MODELS

TEX32TFT
TEX52TFT
TEX302TFT
TEX502TFT
TEX702TFT
TEX1002TFT
TEX1003TFT
TEX1703TFT
TEX2003TFT
TEX2503TFT
TEX5004TFT

R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
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**Discover the brand new low and medium power transmitter Series from R.V.R. Elettronica combining the latest technologies applied to the RF field.With the aim of improving the overall performances, from the interface usability to audio management and broadcasting parameters, this series of Transmitters have been developed to deliver a new high-standard at a very appealing quality-price relation.**

- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **10% - 100% Output Power continuously adjustable.**
- **Low distortion and intermodulation values.**
- **APC Automatic Power Control ensuring reliable operation.**
- **Enhanced energy saving power supply.**
- **Inputs: Analogue Stereo L&R, Mono, MPX. AES/EBU (option).**
- **Auxiliary input for SCA / RDS signals.**
- **RDS encoder option with basic or advances features (option).**
- **WEB, SNMP, GSM, Serial remote controls (option).**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TEX32TFT | **30W** Compact Stereo Transmitter TFT Edition. |
| TEX52TFT | **50W** Compact Stereo Transmitter TFT Edition. |
| TEX302TFT | **300W** Compact Stereo Transmitter TFT Edition. |
| TEX502TFT | **500W** Compact Stereo Transmitter TFT Edition. |
| TEX702TFT | **700W** Compact Stereo Transmitter TFT Edition. |
| TEX1002TFT | **1000W** Compact Stereo Transmitter TFT Edition. |
| TEX1003TFT | **1000W** High Redundancy Compact Stereo Transmitter TFT Edition. |
| TEX1703TFT | **1700W** Compact Stereo Transmitter TFT Edition. |
| TEX2003TFT | **2000W** Compact Stereo Transmitter TFT Edition. |
| TEX2503TFT | **2500W** Compact Stereo Transmitter TFT Edition. |
| TEX5004TFT | **5000W** Compact Stereo Transmitter TFT Edition. |

| OPTION | |
|---|---|
| /AUDIGIN-TFT | AES/EBU audio input. |
| /RDS-TFT2HE | Build-in RDS system with standard UECP 6.1 functions & DSN changeover. |
| /RDS-TFT3HE | Build-in RDS system with standard UECP 6.1 functions & DSN changeover. |
| /RDS-TEX-E-2HE | Build-in RDS system with standard not UECP functions. |
| /RDS-TEX-E-3HE | Build-in RDS system with standard not UECP functions. |
| /RDS-TEX-E-4HE | Build-in RDS system with standard not UECP functions. |
| /TLW-TFT-E-2HE | Basic telemetry system via the internet. |
| /TLW-TFT-E-3HE | Basic telemetry system via the internet. |
| /TLW-TFT-E-4HE | Basic telemetry system via the internet. |
| /CNT7/8-150 | 7/8" EIA flange type output connector option. |
| /CNT7/16-175 | 7/16" output RF connector. |



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Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**TEX1002TFT**

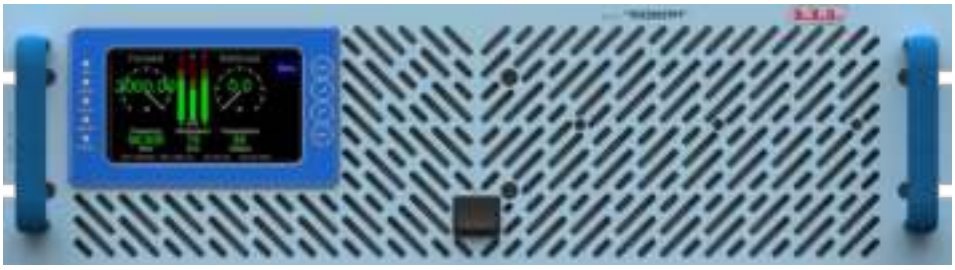
**1000W** Compact Stereo Transmitter TFT Edition.

**TEX1003TFT**

**1000W** High Redundancy Compact Stereo Transmitter TFT Edition.

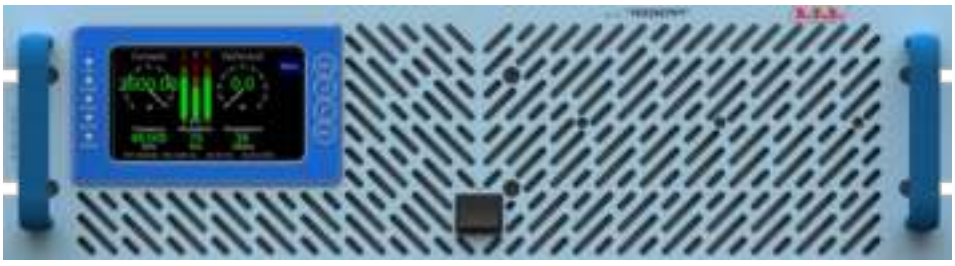
**TEX1703TFT**

**1700W** Compact Stereo Transmitter TFT Edition.



**TEX2003TFT**

**2000W** Compact Stereo Transmitter TFT Edition.



**TEX2503TFT**

**2500W** Compact Stereo Transmitter TFT Edition.

**TEX5004TFT**

**5000W** Compact Stereo Transmitter TFT Edition.

| Parameters | | U.M. | TEX1002TFT | TEX1003TFT | TEX1703TFT | Notes |
|---|---|---|---|---|---|---|
| **GENERALS** | | | | | | |
| **Frequency range** | | MHz | 87,5 - 108 | | | |
| **Rated output power** | | W | 1000 | | 1700 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | F3OOE | | | |
| **Operational mode** | | | Mono, Stereo, MPX | | | |
| **Working temperature** | | °C | -5 to + 50 | | | |
| **Working humidity** | | % | 95 | | | Without condensing |
| **Working altitude** | | m | Up to 3000 | | | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | 10 | | | Step |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 | | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 50, 75 | | | Selectable |
| **POWER REQUIREMENTS** | | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 230 ±15% | | | |
| | AC Apparent Power Consumption | VA | 1450 | 1550 | 2260 | |
| | Active Power Consumption | W | 1447 | 1500 | 2210 | |
| | Power Factor | | 0,998 | | | |
| | Overall Efficiency | % | Typical 70* | | | * Up to 72 in specific conditions. |
| | Connector | | VDE 16A | | | |
| **MECHANICAL DIMENSIONS** | | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | 132 / 5 1/4 3HE | | |
| | Overall depth | mm | 561 | 564 | | |
| | Chassis depth | mm | 470 | 517 | | |
| **Weight** | | kg | Approx. 12 | Approx. 20,50 | Approx. 26 | |
| **Cooling** | | | Forced, with internal fan | | | |
| **Acoustic noise** | | dBA | < 75 | | | |
| **AUDIO INPUTS** | | | | | | |
| **Left / Mono** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 k or 600 | | | |
| | Input Level /Adjust | dBu | -12 to +12 | | | Continuosly adjustable |
| **Right** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 k or 600 | | | |
| | Input Level | dBu | -12 to +12 | | | Continuosly adjustable |
| **MPX** | Connector | | BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k | | | |
| | Input Level / Adjust | dBu | -12 to +12 | | | For 7,5 KHz FM, adjustable |
| **SCA/RDS** | Connector | | 2 x BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k | | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | | For 7,5 KHz FM, adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 110 | | | |
| | Input Level / Adjust | dBfs | 0 to -10 | | | For 7,5 KHz FM, adjustable |
| **TOS/Link (optional)** | Connector | | TOSLINk | | | |
| | Type | | Optical | | | |
| **OUTPUTS** | | | | | | |
| **RF Output** | Connector | | 7/8" | 7/16" | | |
| | Impedance | Ohm | 50 | | | |
| **RF Monitor** | Connector | | BNC | | | |
| | Impedance | Ohm | 50 | | | |
| | Output Level | dBm | 0 ± 4 | | | |
| **Pilot output** | Connector | | BNC | | | |
| | Load Impedance | Ohm | >5 k | | | |
| | Output Level | Vpp | 1 | | | Sinusoidal |
| **FUSES** | | | | | | |
| **On mains** | | | 2 External fuse F 16 A - 6x30 mm | | | |
| **On services** | | | X | | | |
| **On PA Supply** | | | X | | | |
| **On driver supply** | | | X | | | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| Parameters | | U.M. | TEX2003TFT | TEX2503TFT | TEX5004TFT | Notes |
|---|---|---|---|---|---|---|
| **GENERALS** | | | | | | |
| **Frequency range** | | MHz | 87,5 - 108 | | | |
| **Rated output power** | | W | 2000 | 2500 | 5000 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | F3OOE | | | |
| **Operational mode** | | | Mono, Stereo, MPX | | | |
| **Working temperature** | | °C | -5 to + 50 | | | |
| **Working humidity** | | % | 95 | | | Without condensing |
| **Working altitude** | | m | Up to 3000 | | | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | 10 | | | |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 | | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 50, 75 | | | Selectable |
| **POWER REQUIREMENTS** | | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 230 ±15% | | 400 ±10% | Monophase \| Threephases Y |
| | AC Apparent Power Consumption | VA | 2860 | 3550 | 7366 | |
| | Active Power Consumption | W | 2854 | 3543 | 7352 | |
| | Power Factor | | 0,998 | | | |
| | Overall Efficiency | % | Typical 70* | | | *Up to 72 in specific conditions |
| | Connector | | VDE 16A | | ILME CFX 4/2 | |
| **MECHANICAL DIMENSIONS** | | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | | EIA rack |
| | Front panel height | mm / inch | 132 / 5 1/4 3HE | | 177 / 7 4HE | |
| | Overall depth | mm | 564 | | 745 | |
| | Chassis depth | mm | 517 | | 700 | |
| **Weight** | | kg | Approx. 25 | Approx. 27,5 | Approx 42 | |
| **Cooling** | | | Forced, with internal fan | | | |
| **Acoustic noise** | | dBA | < 75 | | | |
| **AUDIO INPUTS** | | | | | | |
| **Left / Mono** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 k or 600 | | | |
| | Input Level /Adjust | dBu | -12 to +12 | | | Continuosly adjustable |
| **Right** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 10 k or 600 | | | |
| | Input Level | dBu | -12 to +12 | | | Continuosly adjustable |
| **MPX** | Connector | | BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k | | | |
| | Input Level / Adjust | dBu | -12 to +12 | | | For 7,5 KHz FM, adjustable |
| **SCA/RDS** | Connector | | 2 x BNC | | | |
| | Type | | Unbalanced | | | |
| | Impedance | Ohm | 10 k | | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | | For 7,5 KHz FM, adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | | |
| | Type | | Balanced | | | |
| | Impedance | Ohm | 110 | | | |
| | Input Level / Adjust | dBfs | 0 to -10 | | | For 7,5 KHz FM, adjustable |
| **TOS/Link (optional)** | Connector | | TOS-LINK | | | |
| | Type | | Optical | | | |
| **OUTPUTS** | | | | | | |
| **RF Output** | Connector | | 7/16" | 7/8" | | |
| | Impedance | Ohm | 50 | | | |
| **RF Monitor** | Connector | | BNC | | | |
| | Impedance | Ohm | 50 | | | |
| | Output Level | dBm | 0 ± 4 | | | |
| **Pilot output** | Connector | | BNC | | | |
| | Load Impedance | Ohm | >5 k | | | |
| | Output Level | Vpp | 1 | | | Sinusoidal |
| **FUSES** | | | | | | |
| **On mains** | | | 2 External fuse F 25 A - 6x30 mm | | 3 External fuse F 20 T - 10x38 mm | |
| **On services** | | | X | | X | |
| **On PA Supply** | | | X | | X | |
| **On driver supply** | | | X | | 1 Internal Fuse F6,3T 5x20 mm | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# PTX-LCD SERIES

## PROFESSIONAL ANALOGIC

from 30W to 150W

MODELS

PTX30LCD/S
PTX50LCD/S
PTX100LCD/S
PTX150LCD/S



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
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- **Globally recognized as the most sold professional exciter.**
- **Excellent as exciter in modular systems or as a compact transmitter.**
- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **10% - 100% Output Power continuously adjustable.**
- **Fold-back control for effective "VSRW" protection.**
- **Includes IAMLC: Intelligent Automatic Modulation Level Control.**
- **Built-in high-performance stereo coder.**
- **Analogue Inputs: Analogue Stereo L&R, Mono, MPX.**
- **Digital Inputs: AES/EBU, S/PDIF, TOSLINK.**
- **Auxiliary input for SCA / RDS signals.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| PTX30LCD/S | **30W** Compact Stereo Transmitter. |
| PTX50LCD/S | **50W** Compact Stereo Transmitter. |
| PTX100LCD/S | **100W** Compact Stereo Transmitter. |
| PTX150LCD/S | **150W** Compact Stereo Transmitter. |

| OPTION | |
|---|---|
| /08DIG-PTX-16 | Telemetry system via parallel interface. |
| /10MHZ-PTX | External 10MHZ cable. |

## PTX30LCD/S

**30W** Compact Stereo Transmitter.

## PTX50LCD/S

**50W** Compact Stereo Transmitter.

## PTX100LCD/S

**100W** Compact Stereo Transmitter.

## PTX150LCD/S

**150W** Compact Stereo Transmitter.



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Fax +39 0516011104
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| Parameters | | U.M. | PTX30LCD/S | PTX50LCD/S | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| Frequency range | | MHz | 87,5 ÷ 108 | | |
| Rated output power | | W | 30 | 50 | Continuously adjustable from 10 to 100% |
| Modulation type | | | Direct carrier frequency | | |
| Operational mode | | | Mono, Stereo, Multiplex | | |
| Working temperature | | °C | -5 to + 50 | | |
| Working humidity | | % | 95 | | Without condensing |
| Working altitude | | m | Up to 3000 | | With adequate air evacuation system in site |
| Frequency programmability | | kHz | From software, with 10 | | Steps |
| Frequency stability | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| Modulation capability | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 200 Mono/MPX | | Meets or exceeds all FCC and CCIR rules |
| Pre-emphasis mode | | µS | 0, 25, 50, (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| AC Power input | AC Supply Voltage | VAC | 115 - 125 - 230 - 250 | | |
| | AC Apparent Power Consumption | VA | 135 | 220 | |
| | Active Power Consumption | W | 95 | 150 | |
| | Power Factor | | 0,68 | | |
| | Overall Efficiency | % | Typical 31 | Typical 33 | |
| | Connector | | IEC Standard | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | |
| | Overall depth | mm | 400 | | |
| | Chassis depth | mm | 389 | | |
| Weight | | kg | About 10 | About 13 | |
| Cooling | | | Forced, with internal fan | | |
| Acoustic noise | | dBA | < 56 | | |
| **AUDIO INPUTS** | | | | | |
| Left / Mono | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| Right | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -13 to +14 | | 1 dB step adjustable |
| MPX | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k or 50 | | |
| | Input Level / Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| SCA/RDS | Connector | | 3 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | Adjustable |
| AES/EBU (optional) | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| TOS/Link (optional) | Connector | | TOS LINk | | |
| | Type | | Optical | | |
| **OUTPUTS** | | | | | |
| RF Output | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| RF Monitor | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -30 | | |
| Pilot output | Connector | | BNC | | |
| | Load Impedance | Ohm | >4.7 k | | |
| | Output Level | Vpp | 1 | | Sinusoidal |
| **FUSES** | | | | | |
| On mains | | | 1 External fuse F 6,3 T - 5x20 mm | | |
| On services | | | X | | |
| On PA Supply | | | 1 External fuse F 6,3 A - 5x20 mm | 1 External fuse F 10 A - 5x20 mm | |
| On driver supply | | | X | | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| Parameters | | U.M. | PTX100LCD/S | PTX150LCD/S | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| Frequency range | | MHz | 87,5 ÷ 108 | | |
| Rated output power | | W | 100 | 150 | Continuously adjustable from 10 to 100% |
| Modulation type | | | Direct carrier frequency | | |
| Operational mode | | | Mono, Stereo, Multiplex | | |
| Working temperature | | °C | -5 to + 50 | | |
| Working humidity | | % | 95 | | Without condensing |
| Working altitude | | m | Up to 3000 | | With adequate air evacuation system in site |
| Frequency programmability | | kHz | From software, with 10 | | Steps |
| Frequency stability | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| Modulation capability | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 200 Mono/MPX | | Meets or exceeds all FCC and CCIR rules |
| Pre-emphasis mode | | µS | 0, 25, 50, (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| AC Power input | AC Supply Voltage | VAC | 115 - 125 - 230 - 250 | | |
| | AC Apparent Power Consumption | VA | 350 | 458 | |
| | Active Power Consumption | W | 250 | 330 | |
| | Power Factor | | 0,71 | 0,72 | |
| | Overall Efficiency | % | Typical 40 | Typical 45 | |
| | Connector | | IEC Standard | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | |
| | Overall depth | mm | 400 | | |
| | Chassis depth | mm | 389 | | |
| Weight | | kg | About 15 | | |
| Cooling | | | Forced, with internal fan | | |
| Acoustic noise | | dBA | < 56 | | |
| **AUDIO INPUTS** | | | | | |
| Left / Mono | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| Right | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -13 to +14 | | 1 dB step adjustable |
| MPX | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k or 50 | | |
| | Input Level / Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| SCA/RDS | Connector | | 3 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | Adjustable |
| AES/EBU (optional) | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| TOS/Link (optional) | Connector | | TOS-LINK | | |
| | Type | | Optical | | |
| **OUTPUTS** | | | | | |
| RF Output | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| RF Monitor | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -30 | | |
| Pilot output | Connector | | BNC | | |
| | Load Impedance | Ohm | >4.7 k | | |
| | Output Level | Vpp | 1 | | Sinusoidal |
| **FUSES** | | | | | |
| On mains | | | 1 External fuse F 6,3 T - 5x20 mm | | |
| On services | | | X | | |
| On PA Supply | | | 1 External fuse F 10 A - 5x20 mm | | |
| On driver supply | | | X | | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# PTX-LCDDSP SERIES

## DSP EVOLUTION

from 30W to 150W

MODELS

PTX30LCDDSP
PTX50LCDDSP
PTX100LCDDSP
PTX150LCDDSP

R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

- **Clear and transparent sound quality.**
- **Noise / signal ratio as low as 90dB.**
- **Low distortion and stereo separation as high as 60dB.**
- **Full compliance with EC, FCC and CCIR standards.**
- **"SFN" Single Frequency Network (option).**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **0% - 100% Output Power continuously adjustable.**
- **Fold-back control for effective "VSRW" protection.**
- **Includes IAMLC: Intelligent Automatic Modulation Level Control.**
- **Built-in high-performance stereo coder.**
- **Analogue Inputs: Analogue Stereo L&R, Mono, MPX.**
- **Digital Inputs: AES/EBU, S/PDIF, TOSLINK.**
- **Auxiliary input for SCA / RDS signals.**
- **Included ITU audio limiter to controll emissions into the spectrum.**
- **Built-in digital RDS encoder with UECP standard functions.**

| ORD RING INFORMATION | |
|---|---|
| Model | |
| PTX30LCDDSP | **30W** Compact Stereo Transmitter. |
| PTX50LCDDSP | **50W** Compact Stereo Transmitter. |
| PTX100LCDDSP | **100W** Compact Stereo Transmitter. |
| PTX150LCDDSP | **150W** Compact Stereo Transmitter. |

| OPTION | |
|---|---|
| /SFN-PTX | Supports SFN applications. |
| /08DIG-PTX-16 | Telemetry system via parallel interface. |
| /10MHZ-PTX | External 10MHZ cable. |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**PTX30LCDDSP**

**30W** Compact Stereo Transmitter.

**PTX50LCDDSP**

**50W** Compact Stereo Transmitter.

**PTX100LCDDSP**

**100W** Compact Stereo Transmitter.

**PTX150LCDDSP**

**150W** Compact Stereo Transmitter.

| Parameters | | U.M. | PTX30LCDDSP | PTX50LCDDSP | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| **Frequency range** | | MHz | 87,5 ÷ 108 | | |
| **Rated output power** | | W | 30 | 50 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | Direct carrier frequency | | |
| **Operational mode** | | | Mono, Stereo, Multiplex | | |
| **Working temperature** | | °C | -5 to + 50 | | |
| **Working humidity** | | % | 85 | | Without condensing |
| **Working altitude** | | m | Up to 3000 | | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | From software, with 10 | | Steps |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 200 Mono/MPX | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 25, 50, (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 115 - 125 - 230 - 250 | | |
| | AC Apparent Power Consumption | VA | 135 | 220 | |
| | Active Power Consumption | W | 95 | 150 | |
| | Power Factor | | 0,7 | | |
| | Overall Efficiency | % | Typical 31 | Typical 33 | |
| | Connector | | IEC Standard | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | |
| | Overall depth | mm | 400 | | |
| | Chassis depth | mm | 389 | | |
| **Weight** | | kg | About 10 | About 13 | |
| **Cooling** | | | Forced, with internal fan | | |
| **Acoustic noise** | | dBA | < 56 | | |
| **AUDIO INPUTS** | | | | | |
| **Left / Mono** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| **Right** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -13 to +14 | | 1 dB step adjustable |
| **MPX** | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k or 50 | | |
| | Input Level / Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| **SCA/RDS** | Connector | | 3 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | Adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| **TOS/Link (optional)** | Connector | | TOS LINk | | |
| | Type | | Optical | | |
| **OUTPUTS** | | | | | |
| **RF Output** | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| **RF Monitor** | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -30 | | |
| **Pilot output** | Connector | | BNC | | |
| | Load Impedance | Ohm | >4.7 k | | |
| | Output Level | Vpp | 1 | | Sinusoidal |
| **FUSES** | | | | | |
| **On mains** | | | 1 External fuse F 6,3 T - 5x20 mm | | |
| **On services** | | | X | | |
| **On PA Supply** | | | 1 External fuse F 6,3 A - 5x20 mm | 1 External fuse F 10 A - 5x20 mm | |
| **On driver supply** | | | X | | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
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Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| | | | PTX100LCDDSP | PTX150LCDDSP | |
|---|---|---|---|---|---|
| **Parameters** | | U.M. | Value | | Notes |
| **GENERALS** | | | | | |
| **Frequency range** | | MHz | 87,5 ÷ 108 | | |
| **Rated output power** | | W | 100 | 150 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | Direct carrier frequency | | |
| **Operational mode** | | | Mono, Stereo, Multiplex | | |
| **Working temperature** | | °C | -5 to + 50 | | |
| **Working humidity** | | % | 85 | | Without condensing |
| **Working altitude** | | m | Up to 3000 | | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | From software, with 10 | | Steps |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 Stereo, 200 Mono/MPX | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 25, 50, (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 115 - 125 - 230 - 250 | | |
| | AC Apparent Power Consumption | VA | 350 | 458 | |
| | Active Power Consumption | W | 250 | 330 | |
| | Power Factor | | 0,71 | 0,72 | |
| | Overall Efficiency | % | Typical 40 | Typical 45 | |
| | Connector | | IEC Standard | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | |
| | Overall depth | mm | 400 | | |
| | Chassis depth | mm | 389 | | |
| **Weight** | | kg | About 15 | | |
| **Cooling** | | | Forced, with internal fan | | |
| **Acoustic noise** | | dBA | < 56 | | |
| **AUDIO INPUTS** | | | | | |
| **Left / Mono** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| **Right** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -13 to +14 | | 1 dB step adjustable |
| **MPX** | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k or 50 | | |
| | Input Level / Adjust | dBu | -13 to +14 | | 1 dB step adjustable |
| **SCA/RDS** | Connector | | 3 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | Adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| **TOS/Link (optional)** | Connector | | TOS-LINK | | |
| | Type | | Optical | | |
| **OUTPUTS** | | | | | |
| **RF Output** | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| **RF Monitor** | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -30 | | |
| **Pilot output** | Connector | | BNC | | |
| | Load Impedance | Ohm | >4.7 k | | |
| | Output Level | Vpp | 1 | | Sinusoidal |
| **FUSES** | | | | | |
| **On mains** | | | 1 External fuse F 6,3 T - 5x20 mm | | |
| **On services** | | | X | | |
| **On PA Supply** | | | 1 External fuse F 10 A - 5x20 mm | | |
| **On driver supply** | | | X | | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# PTX-DDS SERIES

## FULL DIGITAL DDS

from 30W to 1000W MODELS

## PTX30DDS PTX150DDS
## PTX100DDS PTX1000DDS



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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- **Full Digital modulation of the carrier directly on the operating frequency without any conversion.**
- **DDS "Direct to Channel" Exciter / Transmitter.**
- **Generates a RF signal free from mechanical disturbances.**
- **Clear and transparent digital audio .**
- **Noise / signal ratio as low as 90dB.**
- **Low distortion and stereo separation as high as 70dB.**
- **"SFN" Single Frequency Network (option).**
- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **0% - 100% Output Power continuously adjustable.**
- **Fold-back control for effective "VSRW" protection.**
- **Includes IAMLC: Intelligent Automatic Modulation Level Control.**
- **Timing, Priority and Changeover functions on all audio inputs.**
- **Analogue Inputs: Analogue Stereo L&R, Mono, MPX.**
- **Digital Inputs: AES/EBU, S/PDIF, TOSLINK.**
- **Built-in high-performance stereo coder.**
- **Auxiliary input for SCA / RDS signals.**
- **Included ITU audio limiter to controll emissions into the spectrum.**
- **Suitable for isofrequency applications thanks to a optional SFN board.**
- **Built-in digital RDS encoder with UECP standard functions.**
- **WEB, SNMP2, GSM, Serial remote controls (option).**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| PTX30DDS | **30W** Compact Stereo Transmitter. |
| PTX100DDS | **100W** Compact Stereo Transmitter. |
| PTX150DDS | **150W** Compact Stereo Transmitter. |
| PTX1000DDS | **1000W** Compact Stereo Transmitter. |

| OPTION | |
|---|---|
| /SFN-DDS | Supports SFN applications. |
| /TLW-DDS-E | WEB & SNMP telemetry extension card. |
| /TLW-DDS-AOIP | Audio over IP , WEB , SNMP telemetry extension card. |
| /08-DIG-DDS | Telemetry via parallel interface. |
| /09-DIG-DDS | Digital telemetry via SCM6 interface. |
| /10MHZ-DDS | External 10MHZ cable. |

## PTX30DDS

**30W** Compact Stereo Transmitter.

## PTX100DDS

**100W** Compact Stereo Transmitter.

## PTX150DDS

**150W** Compact Stereo Transmitter.

## PTX1000DDS

**1000W** Compact Stereo Transmitter.



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| Parameters | | U.M. | PTX30DDS | PTX100DDS | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| Frequency range | | MHz | 87,5 ÷ 108 | | |
| Rated output power | | W | 30 | 100 | Continuously adjustable from 10 to 100% |
| Modulation type | | | Direct Digital Synthesis | | |
| Operational mode | | | Mono, Stereo, Multiplex | | |
| Working temperature | | °C | -5 to + 50 | | |
| Working humidity | | % | 95 | | Without condensing |
| Working altitude | | m | Up to 3000 | | With adequate air evacuation system in site |
| Frequency programmability | | kHz | From software, with 1, 10, 100, 1000 | | Steps |
| Frequency stability | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| Modulation capability | Refered @ 0dBu for 75kHz | kHz | 150 | | Meets or exceeds all FCC and CCIR rules |
| Pre-emphasis mode | | µS | 0, 50 (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| AC Power input | AC Supply Voltage | VAC | 115 / 230 ±15% | | Internal switch |
| | AC Apparent Power Consumption | VA | 280 | 410 | |
| | Active Power Consumption | W | 160 | 250 | |
| | Power Factor | | 0,57 | 0,6 | |
| | Overall Efficiency | % | Typical 18 | Typical 40 | |
| | Connector | | VDE IEC Standard | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | | |
| | Overall depth | mm | 400 | | |
| | Chassis depth | mm | 389 | | |
| Weight | | kg | About 10 | | |
| Cooling | | | Forced, with internal fan | | |
| Acoustic noise | | dBA | < 56 | | |
| **AUDIO INPUTS** | | | | | |
| Left / Mono | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -12,5 to +12,5 | | 0,1 dB step adjustable |
| Right | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -12,5 to +12,5 | | 0,1 dB step adjustable |
| MPX | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Input Level / Adjust | dBu | -12,5 to +12,5 | | 0,1 dB step adjustable |
| SCA/RDS | Connector | | 2 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | 0,5 dB step adjustable |
| AES/EBU (optional) | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| TOS/Link (optional) | Connector | | TOS LINk | | |
| | Type | | Optical | | |
| **OUTPUTS** | | | | | |
| RF Output | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| RF Monitor | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -30 | Approx. -40 | |
| Pilot output | Connector | | BNC | | |
| | Load Impedance | Ohm | >600 k | | |
| | Output Level | Vpp | 2,2 | | Sinusoidal |
| **FUSES** | | | | | |
| On mains | | | 1 External fuse F 6,3 AT - 5x20 mm | | |
| On services | | | X | | |
| On PA Supply | | | X | | |
| On driver supply | | | X | | |



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Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| Parameters | | U.M. | PTX150DDS | PTX1000DDS | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| **Frequency range** | | MHz | 87,5 ÷ 108 | | |
| **Rated output power** | | W | 150 | 1000 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | Direct Digital Synthesis | | |
| **Operational mode** | | | Mono, Stereo, Multiplex | | |
| **Working temperature** | | °C | -5 to + 50 | | |
| **Working humidity** | | % | 95 | | Without condensing |
| **Working altitude** | | m | Up to 3000 | | With adequate air evacuation system in site |
| **Frequency programmability** | | kHz | From software, with 1, 10, 100, 1000 | | Steps |
| **Frequency stability** | Working Temp. from -5°C to 50°C | ppm | ±1 | | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 150 | | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis mode** | | µS | 0, 50 (CCIR), 75 (FCC) | | Selectable |
| **POWER REQUIREMENTS** | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 115 / 230 ±15% | 80 ÷ 260 | Internal switch |
| | AC Apparent Power Consumption | VA | 520 | 1460 | |
| | Active Power Consumption | W | 310 | 1450 | |
| | Power Factor | | 0,61 | 0,99 | |
| | Overall Efficiency | % | Typical 48 | Typical 70 | |
| | Connector | | VDE IEC Standard | Terminal Block | |
| **MECHANICAL DIMENSIONS** | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 2HE | 132 / 5 1/4 3HE | |
| | Overall depth | mm | 500 | | |
| | Chassis depth | mm | 389 | | |
| **Weight** | | kg | About 10 | About 17 | |
| **Cooling** | | | Forced, with internal fan | | |
| **Acoustic noise** | | dBA | < 56 | < 65 | |
| **AUDIO INPUTS** | | | | | |
| **Left / Mono** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level /Adjust | dBu | -12,5 to +12,5 | | 0,1 dB step adjustable |
| **Right** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 10 k or 600 | | |
| | Input Level | dBu | -12,5 to +12,5 | | 0,1 dB step adjustable |
| **MPX** | Connector | | BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Input Level / Adjust | dBu | -12,5 to +12,5 | | 0,1 dB step adjustable |
| **SCA/RDS** | Connector | | 2 x BNC | | |
| | Type | | Unbalanced | | |
| | Impedance | Ohm | 10 k | | |
| | Subcarier Level @ 0 dBu | dB | -17 to -40 | | 0,5 dB step adjustable |
| **AES/EBU (optional)** | Connector | | XLR F | | |
| | Type | | Balanced | | |
| | Impedance | Ohm | 110 | | |
| **TOS/Link (optional)** | Connector | | TOS LINK | | |
| | Type | | Optical | | |
| **OUTPUTS** | | | | | |
| **RF Output** | Connector | | N type | 7/8 type | |
| | Impedance | Ohm | 50 | | |
| **RF Monitor** | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBm | Approx. -40 | | |
| **Pilot output** | Connector | | BNC | | |
| | Load Impedance | Ohm | >600 k | | |
| | Output Level | Vpp | 2,2 | | Sinusoidal |
| **FUSES** | | | | | |
| **On mains** | | | 1 External fuse F 6,3 AT - 5x20 mm | | |
| **On services** | | | X | | |
| **On PA Supply** | | | X | | |
| **On driver supply** | | | X | | |





R.V.R. Elettronica S.r.l.
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40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
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# DIGITAL RADIO

DAB+ / DMB DIGITAL RADIO

**RVR Elettronica, which has always been committed to Digital Radio, already designed the Gold Video series in 2000, a line of transmitters with Teamcast cores that support current digital standards (DAB-DAB + / DMB). This historic family of devices has now been renewed with the DRT family which represents the state of the art.DAB+/DMB Transmitters 50W to 1.000W.**
**Gold Video Family - Last generation DRT Serie.**

- **Fully agile from 175 to 240 MHz without any adjustment.**
- **Support MFN and SFN with integrated GPS Receiver.**
- **Teamcast Modulator Core forthe highest modulation quality.**
- **Rugged for stable operation, high MTBF and long life.**
- **Output power range from 50W to 1 KW, other on request.**
- **Linear and Adaptative precorrection (auto function).**
- **Compact 19” standardt cabin : DRT 500W in 2 HE, 1000W in 4 HE.**
- **Optional SAT Receiver DVBS/ DVBS2.**
- **High MER (typical 35 dB @ full Output Power).**
- **High Shoulders (typical 40 dB without Output Filter).**
- **Linear and Adaptative precorrection (auto function).**
- **RF Doherty Amplifier for maximum of Efficiency (only DRT).**
- **Colour 3.5” Touch Screen for easy setting (only DRT).**
- **SNMP2 Telemetry (only DRT).**
- **Innovative monitoring over Telegram™ (only DRT).**

# DRT
# SERIES
## DAB+ DMB DIGITAL RADIO

from 50W to 1000W

MODELS

DRT50
DRT100
DRT150
DRT250
DRT300
DRT500
DRT700
DRT1000



R.V.R. Elettronica S.r.l.
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40138 Bologna Italy

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Fax +39 0516011104
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- **Designed to ensure stable operations, high MTBF and long life.**
- **State of the art evolution of the RVR GOLD Family.**
- **Output power range from 50W to 1 KW, other on request.**
- **Teamcast core for an undisputed modulation quality.**
- **Compact cabin : 2 units up to 500W 4 units up to 1000W rms.**
- **Fully agile from 175 to 240 MHz without any adjustment.**
- **Support MFN and SFN configuration with integrated GPS Receiver.**
- **Broadband Doherty Amplifier for maximum of Efficiency.**
- **Optional SAT Receiver DVBS/ DVBS2.**
- **Colour 3.5" Touch Screen and buttons for easy setting.**
- **High MER (typical 35 dB @ full Output Power).**
- **High Shoulders (typical 40 dB without Output Filter).**
- **Linear and Adaptative precorrection (auto function).**
- **SNMP2 Remote control.**
- **Innovative network monitoring capability over Telegram™ (option).**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| DRT50 | TX DAB+ compact 2 units Rack Doherty 50W rms with integrated Rx GPS. |
| DRT100 | TX DAB+ compact 2 units Rack Doherty 100W rms with integrated Rx GPS. |
| DRT150 | TX DAB+ compact 2 units Rack Doherty 150W rms with integrated Rx GPS. |
| DRT250 | TX DAB+ compact 2 units Rack Doherty 250W rms with integrated Rx GPS. |
| DRT300 | TX DAB+ compact 2 units Rack Doherty 300W rms with integrated Rx GPS. |
| DRT500 | TX DAB+ compact 2 units Rack Doherty 500W rms with integrated Rx GPS. |
| DRT700 | TX DAB+ compact 4 units Rack Doherty 700W rms with integrated Rx GPS. |
| DRT1000 | TX DAB+ compact 4 units Rack Doherty 1000W rms with integrated Rx GPS. |

| OPTION | |
|---|---|
| /TWINEDI | Dual EDI inputs. |
| /RXDVBS2 | Integrated DVBS-DVBS2 receiver. |
| /RXGLONS | Integrated glonass receiver. |
| /TELEGRAM | Telegram™ interface. |
| /SURSATIN | Surge protector RF satellite input. |
| /SURLAIN | Surge protector for LAN input. |
| /GPSANTS | GPS antenna with support. |

**DRT50**

**50W** Compact Transmitter.

**DRT100**

**100W** Compact Transmitter.

**DRT150**

**150W** Compact Transmitter.

**DRT250**

**250W** Compact Transmitter.

**DRT300**

**300W** Compact Transmitter.

**DRT500**

**500W** Compact Transmitter.



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Fax +39 0516011104
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## DRT700

**700W** Compact Transmitter.

## DRT1000

**1000W** Compact Transmitter.

| | | | DRT50 | DRT100 | DRT150 | |
|---|---|---|---|---|---|---|
| **Parameters** | | U.M. | Value | | | Notes |
| **GENERALS** | | | | | | |
| **Frequency range** | according standard | MHz | VHF Bd.III from 175 to 240 | | | |
| **Rated output power** | rms | W | 50 | 100 | 150 | |
| **Standards** | for DAB/DAB+ | | DAB-DAB+ : ETSI EN 300401v1.4.1-30277-2 | | | |
| **Standards :** | for DMB | | DMB: EN 62516-1:2009 | | | |
| **MER @ full Power** | | dB | > 34 ( Typical 35) | | | |
| **Shoulder @ full power** | without Channel Filter | dB | > 38 | | | |
| **Operational mode** | DAB | | Mode I, Mode II, Mode III, Mode IV | | | |
| **Network Mode** | DAB-DAB+ / DMB | | MFN / SFN | | | |
| **Synchronisation** | integrated GPS Receiver | | GPS standard (GLONASS opzion) Nf for antenna | | | |
| **Precorrection** | linear, non linear | | static, single, continuous, adaptative | | | |
| **RF Output connector** | | | Nf (DRT50) | Nf (DRT100) | Nf (DRT150) | |
| **ENVIROMENTAL WORKING PARAMETERS** | | | | | | |
| **Temperature/ Humidity** | | °C / % | -10 to + 45 / 95 relative, no condensing | | | |
| **Working altitude** | | mt. absl | standard : 2500 / optional: 3000 | | | |
| **Cooling** | forced air cooling | | 2 blowers | 2 blowers | 3 blowers | |
| **MECHANICAL DIMENSIONS** | | | | | | |
| **Phisical dimensions** | Front panel width /height | mm / inch | 482.60/ 19" EIA - 2 HE (88.90) | | | EIA rack |
| | Overall depth | mm / inch | 550 / 21.65 | | | |
| | Chassis depth | mm / inch | 520 / 20.47 | | | |
| | Weight | kg | About 11 | About 11 | About 13 | |
| **MAINS POWER REQUIREMENTS** | | | | | | |
| **AC Power Consumption (@ 25°C Temperature)** | AC Supply Voltage | VAC | single phase 230 V / 50Hz - 110 V / 60Hz ± 15% | | | |
| | Apparent / Active | VA / W-KW | 307 /300 | 355/345 | 408/400 | |
| | Power Factor | % | 0,98 | | | |
| | Overall Efficiency (@°C) | % | 30-35 | 30-35 | 38-40 | |
| | On Mains / on PA | A | 6.3 / 10 | 6.3 / 10 | 8 /20 | |
| **INPUT / OUTPUT INTERFACES** | | | | | | |
| **ETI / EDI INTERFACES / ETSI ETS 300 799 v 1.5.1** | | | 2 x G703 ( BNC 75 Ohm) ,NI (G703), NA5376 (G704), auto detection @ 2040 kbps ± 50 ppm / 1 x ETI OUT ( BNC 75 Ohm) | | | |
| **IP STREAM INTERFACE** | | | 2 x 10/100/1000 base T ( RJ45)IP, RTP, UDP, IGMP (V2&V3) , V-LAN ID (1to 4094), IEEE 802.1q EDI De-Encapsulation (TS 102 693) | | | |
| **RX SAT RECEIVER DVBS/S2** | Integrated (option) | | 1 x INPUT DVBS2 (950-2150 MHz) (F75 Ohm), -25/-62 DbM, gse De-Encapsulation ( TS 102606) | | | |
| **CONTROL/ MONITORING** | | | 1 x 10/100/1000 Ethernet (RJ45), WEB GUI SNMP) 3.5 " Colour Touch Screen and buttons | | | |
| **COMPLIANCE & CONFORMITY** | | | RED 2014/53/ EU, Safety EN 60215 , EMC EN 301-489-1/53, ETSI EN 302 077 | | | |
| **AVAILABLE OPTIONS:** | | | | | | |
| | | | /TWINEDI /RXDVBS2 /RXGLONS /TELEGRAM /SURSATIN /SURLAIN /GPSANTS | | | |





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Fax +39 0516011104
sales@rvr.it - www.rvr.it

| | | | DRT250 | DRT300 | DRT500 | |
|---|---|---|---|---|---|---|
| **Parameters** | | U.M. | Value | | | Notes |
| **GENERALS** | | | | | | |
| **Frequency range** | according standard | MHz | VHF Bd.III from 175 to 240 | | | |
| **Rated output power** | rms | W | 250 | 300 | 500 | |
| **Standards** | for DAB/DAB+ | | DAB-DAB+ : ETSI EN 300401v1.4.1-30277-2 | | | |
| **Standards :** | for DMB | | DMB: EN 62516-1:2009 | | | |
| **MER @ full Power** | | dB | > 34 ( Typical 35) | | | |
| **Shoulder @ full power** | without Channel Filter | dB | > 38 | | | |
| **Operational mode** | DAB | | Mode I, Mode II, Mode III, Mode IV | | | |
| **Network Mode** | DAB-DAB+ / DMB | | MFN / SFN | | | |
| **Synchronisation** | integrated GPS Receiver | | GPS standard (GLONASS opzion) Nf for antenna | | | |
| **Precorrection** | linear, non linear | | static, single, continuous, adaptative | | | |
| **RF Output connector** | | | Nf (DRT250) | Nf (DRT300) | DIN 7/16" f (DRT500) | |
| **ENVIROMENTAL WORKING PARAMETERS** | | | | | | |
| **Temperature/ Humidity** | | °C / % | -10 to + 45 / 95 relative, no condensing | | | |
| **Working altitude** | | mt. absl | standard : 2500 / optional: 3000 | | | |
| **Cooling** | forced air cooling | | 4 blowers | | | |
| **MECHANICAL DIMENSIONS** | | | | | | |
| **Phisical dimensions** | Front panel width /height | mm / inch | 482.60/ 19" EIA - 2 HE (88.90) | | | EIA rack |
| | Overall depth | mm / inch | 550 / 21.65 | | | |
| | Chassis depth | mm / inch | 520 / 20.47 | | | |
| | Weight | kg | About 15 | | | |
| **MAINS POWER REQUIREMENTS** | | | | | | |
| **AC Power Consumption (@ 25°C Temperature)** | AC Supply Voltage | VAC | single phase 230 V / 50Hz - 110 V / 60Hz ± 15% | | | |
| | Apparent / Active | VA / W-KW | 735/720 | 845/830 | 1.32/1.3 | |
| | Power Factor | % | 0,98 | | | |
| | Overall Efficiency (@°C) | % | 38-40 | | | |
| | On Mains / on PA | A | 8 /20 | 8 /20 | B.16 / 2x20 | |
| **INPUT / OUTPUT INTERFACES** | | | | | | |
| **ETI / EDI INTERFACES / ETSI ETS 300 799 v 1.5.1** | | | 2 x G703 ( BNC 75 Ohm) ,NI (G703), NA5376 (G704), auto detection @ 2040 kbps ± 50 ppm / 1 x ETI OUT ( BNC 75 Ohm) | | | |
| **IP STREAM INTERFACE** | | | 2 x 10/100/1000 base T ( RJ45)IP, RTP, UDP, IGMP (V2&V3) , V-LAN ID (1to 4094), IEEE 802.1q EDI De-Encapsulation (TS 102 693) | | | |
| **RX SAT RECEIVER DVBS/S2** | Integrated (option) | | 1 x INPUT DVBS2 (950-2150 MHz) (F75 Ohm), -25/-62 DbM, gse De-Encapsulation ( TS 102606) | | | |
| **CONTROL/ MONITORING** | | | 1 x 10/100/1000 Ethernet (RJ45), WEB GUI SNMP) 3.5 " Colour Touch Screen and buttons | | | |
| **COMPLIANCE & CONFORMITY** | | | RED 2014/53/ EU, Safety EN 60215 , EMC EN 301-489-1/53, ETSI EN 302 077 | | | |
| **AVAILABLE OPTIONS:** | | | | | | |
| | | | /TWINEDI /RXDVBS2 /RXGLONS /TELEGRAM /SURSATIN /SURLAIN /GPSANTS | | | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| Parameters | | U.M. | DRT700 | DRT1000 | Notes |
|---|---|---|---|---|---|
| **GENERALS** | | | | | |
| Frequency range | according standard | MHz | VHF Bd.III from 175 to 240 | | |
| Rated output power | rms | W | 700 | 1000 | |
| Standards | for DAB/DAB+ | | DAB-DAB+ : ETSI EN 300401v1.4.1-30277-2 | | |
| Standards : | for DMB | | DMB: EN 62516-1:2009 | | |
| MER @ full Power | | dB | > 34 ( Typical 35) | | |
| Shoulder @ full power | without Channel Filter | dB | > 38 | | |
| Operational mode | DAB | | Mode I, Mode II, Mode III, Mode IV | | |
| Network Mode | DAB-DAB+ / DMB | | MFN / SFN | | |
| Synchronisation | integrated GPS Receiver | | GPS standard (GLONASS opzion) Nf for antenna | | |
| Precorrection | linear, non linear | | static, single, continuous, adaptative | | |
| RF Output connector | | | DIN 7/16" female / EIA 7/8" Flange | | |
| **ENVIROMENTAL WORKING PARAMETERS** | | | | | |
| Temperature/ Humidity | | °C / % | -10 to + 45 / 95 relative, no condensing | | |
| Working altitude | | mt. absl | standard : 2500 / optional: 3000 | | |
| Cooling | forced air cooling | | 9 blowers | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| Phisical dimensions | Front panel width /height | mm / inch | 482.60 / 19" EIA - 4 HE (177.80) | | |
| | Overall depth | mm / inch | 635 / 25 | | |
| | Chassis depth | mm / inch | 580 /22.83 | | |
| | Weight | kg | About 23 | | |
| **MAINS POWER REQUIREMENTS** | | | | | |
| AC Power Consumption (@ 25°C Temperature) | AC Supply Voltage | VAC | single phase 230 V / 50Hz - 110 V / 60Hz ± 15% | | |
| | Apparent / Active | VA / W-KW | 1.990 /1.950 | 2.500 / 2.450 | |
| | Power Factor | % | 0,98 | | |
| | Overall Efficiency (@°C) | % | 40 ( ± 5) | | |
| | On Mains / on PA | A | MT Brek. 16 / 2x 30 | | |
| **INPUT / OUTPUT INTERFACES** | | | | | |
| ETI / EDI INTERFACES / ETSI ETS 300 799 v 1.5.1 | | | 2 x G703 ( BNC 75 Ohm) ,NI (G703), NA5376 (G704), auto detection @ 2040 kbps ± 50 ppm / 1 x ETI OUT ( BNC 75 Ohm) | | |
| IP STREAM INTERFACE | | | 2 x 10/100/1000 base T ( RJ45)IP, RTP, UDP, IGMP (V2&V3) , V-LAN ID (1to 4094), IEEE 802.1q EDI De-Encapsulation (TS 102 693) | | |
| RX SAT RECEIVER DVBS/S2 | Integrated (option) | | 1 x INPUT DVBS2 (950-2150 MHz) (F75 Ohm), -25/-62 DbM, gse De-Encapsulation ( TS 102606) | | |
| CONTROL/ MONITORING | | | 1 x 10/100/1000 Ethernet (RJ45), WEB GUI SNMP) 3.5 " Colour Touch Screen and buttons | | |
| COMPLIANCE & CONFORMITY | | | RED 2014/53/ EU, Safety EN 60215 , EMC EN 301-489-1/53, ETSI EN 302 077 | | |
| **AVAILABLE OPTIONS:** | | | | | |
| | | | /TWINEDI /RXDVBS2 /RXGLONS /TELEGRAM /SURSATIN /SURLAIN /GPSANTS | | |





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# FM STATIONS

AIR-COOLED STATIONS AND TRANSMITTING SYSTEMS

**We have a complete range of air-cooled stations and transmitting systems for powers from 1000 W to 60 KW in modular or hot-pluggable configuration, in 1 + 0, 1 + 1 or N + 1 integrated with accessories and telemetry systems according to customer needs.**

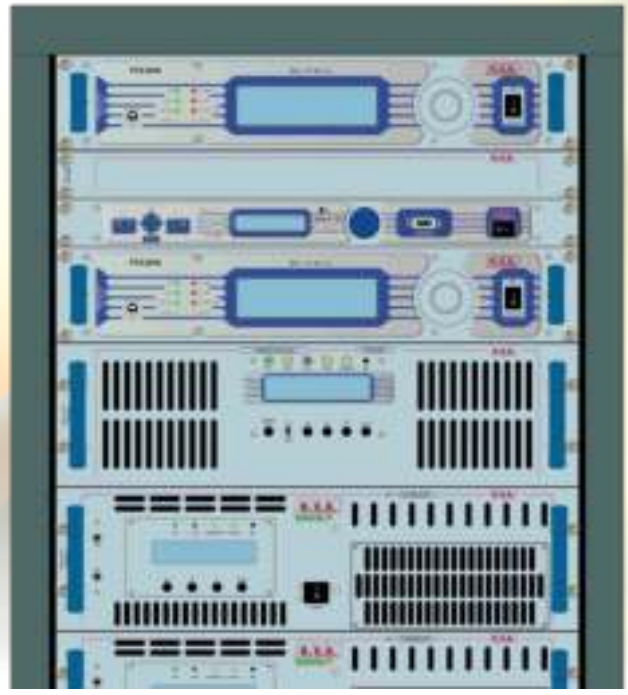
# TX-KSS MODULAR SERIES

## MID/HIGH POWER AIR COOLED

from 2000W to 14.000W

MODELS

TX02KSS TX03KSS TX3K5SS
TX04KSS TX05KSS TX07KSS
TX7K5SS TX10KSS TX12KSS
TX14KSS





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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Fax +39 0516011104
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- **Scalable Solution from 2.000W to 14.000W.**
- **Best transmission quality, at the best market place.**
- **The most flexible combinations available for high reliability and redundancy**
- **N+1 Configuration available for 24/7 business continuity.**
- **Tunable over the entire FM band 87.5 - 108 MHz, without tuning. Other bands on request.**
- **WEB, SNMP2, GSM, Serial remote controls (option).**
- **Full compliance with EC, FCC and CCIR standards.**

**Exciters:**

- **BLUES, TEX, PTX Series depending on client's requirements and budget.**
- **Single and Dual Drive with automatic or manual changeover.**
- **Fold-back control for effective "VSRW" protection.**
- **Including IAMLC: Intelligent Automatic Modulation Level Control.**

**Amplifiers:**

- **Single amplifier's unis: from 1.000W to 3.500W.**
- **High-gain with very low input drive power requirement.**
- **Adjustable power output from 10 to 100 %.**
- **Exclusive "Long Life FET" technology for mosfet life extension.**

**TX05KSS/61D082B**

Modular transmitter, 5KW
(composed of HC2 + 2x PJ2500LCD
+ SCML1+1SL/V2 + 2x PTX100DDS).

**TX07KSS/61D122B**

Modular transmitter, 7KW
(composed of HC2 + 2x PJ3500LCD
+ SCML1+1SL/V2 + 2x PTX100DDS).

**TX7K5SS/61D083B**

Modular transmitter, 7.5KW
(composed of HC3 + 3x PJ2500LCD
+ SCML1+1SL/V2 + 2x PTX100DDS).

**TX10KSS/62D084B**

Modular transmitter, 10KW
(composed of HC4 + 4x PJ2500LCD
+ SCML1+1SL/V2 + 2x PTX150DDS).



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## TX05KSS/61D082B

| Parameters | U.M. | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| RF Output Power | kW | 5 | |
| Frequency Range | MHz | 87,5 – 108 | |
| Frequency Stability | ppm | > 1 | |
| Frequency programmability | | By software, with 1, 10, 100 , 1000 kHz steps | |
| Nominal Frequency Deviation | | ±75 KHz (peak) | |
| Maximum Frequency Deviation | | ±150 KHz (peak) | |
| Class of Emission | | 180KF8E Direct to Channel | |
| Modulation Mode | | Mono, Stereo, Multiplex, SCA, RDS, Aux | |
| Stereo transmissions | | Acc. to ITU-R / Rec. 450 (Pilot tone) | |
| RF Output Impedance | | 50 Ω, Unbalanced | |
| RF Output Connector | | 1-5/8" EIA Flange | |
| VSWR | | 1.4:1 with automatic fold-back at higher VSWR | |
| Pre-emphasis Mode | | 0/50 (CCIR) µs,75 (FCC) µs | |
| Asynchronous AM S/N Ratio | dB | Typically > 70 | |
| Synchronous AM S/N Ratio | dB | Typically > 55 | |
| Harmonics suppression and Spurious | dB | Typically < 85 | |
| Overall efficiency | % | Typically > 70 | |
| RF Harmonics | | Exceeds ETSI/CCIR/FCC requirements | |
| RF Spurious | | Exceeds ETSI/CCIR/FCC requirements | |
| Analogue Input level {+75 Khz (peak) deviation } | | -12,5 dBu - +12,5 dBu (adjustable) | |
| Digital Input level {+75 Khz (peak) deviation } | | -20,0 dBFS – 0 dBFS (adjustable) | |
| **MONO OPERATION** | | | |
| S/N ratio | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise | % | Typically < 0,03 | |
| Inter Modulation Distortion SMPTE | % | Typically < 0,02 | |
| Frequency Response | dB | Typically ± 0,2 | |
| Audio Input Impedance | | 600 Ω or 10 kΩ | |
| **MPX OPERATION** | | | |
| Composite S/N ratio | dB | Typically > 80 | |
| Total Harmonic Distortion + Noise | % | Typically < 0,05 | |
| Inter Modulation Distortion | % | Typically < 0,05 | |
| Frequency Response | dB | Typically ± 0,2 | |
| Audio Input Impedance | | 10 kΩ | |
| **STEREO OPERATION** | | | |
| Stereo FM S/N Ratio | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise (L or R) | % | Typically < 0,02 | |
| Inter Modulation Distortion SMPTE (L or R) | % | Typically < 0,02 | |
| Frequency response (L or R) | dB | Typically ± 0,2 | |
| Linear Cross Talk | dB | Typically > 50 | |
| Non-linear Cross Talk | dB | Typically > 50 | |
| Stereo Separation (Sine Wave) | dB | Typically > 70 | |
| Audio Input Impedance | | 600 Ω or 10 kΩ | |
| Digital Input Impedance | | 110 Ω | |



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40138 Bologna Italy

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Fax +39 0516011104
sales@rvr.it - www.rvr.it

## TX10KSS/62D084B

| Parameters | U.M. | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| RF Output Power | kW | 10 | |
| Frequency Range | MHz | 87,5 – 108 | |
| Frequency Stability | ppm | > 1 | |
| Frequency programmability | | By software, with 1, 10, 100 , 1000 kHz steps | |
| Nominal Frequency Deviation | | ±75 KHz (peak) | |
| Maximum Frequency Deviation | | ±150 KHz (peak) | |
| Class of Emission | | 180KF8E Direct to Channel | |
| Modulation Mode | | Mono, Stereo, Multiplex, SCA, RDS, Aux | |
| Stereo transmissions | | Acc. to ITU-R / Rec. 450 (Pilot tone) | |
| RF Output Impedance | | 50 Ω, Unbalanced | |
| RF Output Connector | | 1-5/8" EIA Flange | |
| VSWR | | 1.4:1 with automatic fold-back at higher VSWR | |
| Pre-emphasis Mode | | 0/50 (CCIR) µs,75 (FCC) µs | |
| Asynchronous AM S/N Ratio | dB | Typically > 70 | |
| Synchronous AM S/N Ratio | dB | Typically > 55 | |
| Harmonics suppression and Spurious | dB | Typically < 85 | |
| Overall efficiency | % | Typically > 70 | |
| RF Harmonics | | Exceeds ETSI/CCIR/FCC requirements | |
| RF Spurious | | Exceeds ETSI/CCIR/FCC requirements | |
| Analogue Input level {+75 Khz (peak) deviation } | | -12,5 dBu - +12,5 dBu (adjustable) | |
| Digital Input level {+75 Khz (peak) deviation } | | -20,0 dBFS – 0 dBFS (adjustable) | |
| **MONO OPERATION** | | | |
| S/N ratio | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise | % | Typically < 0,03 | |
| Inter Modulation Distortion SMPTE | % | Typically < 0,02 | |
| Frequency Response | dB | Typically ± 0,2 | |
| Audio Input Impedance | | 600 Ω or 10 kΩ | |
| **MPX OPERATION** | | | |
| Composite S/N ratio | dB | Typically > 80 | |
| Total Harmonic Distortion + Noise | % | Typically < 0,05 | |
| Inter Modulation Distortion | % | Typically < 0,05 | |
| Frequency Response | dB | Typically ± 0,2 | |
| Audio Input Impedance | | 10 kΩ | |
| **STEREO OPERATION** | | | |
| Stereo FM S/N Ratio | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise (L or R) | % | Typically < 0,02 | |
| Inter Modulation Distortion SMPTE (L or R) | % | Typically < 0,02 | |
| Frequency response (L or R) | dB | Typically ± 0,2 | |
| Linear Cross Talk | dB | Typically > 50 | |
| Non-linear Cross Talk | dB | Typically > 50 | |
| Stereo Separation (Sine Wave) | dB | Typically > 70 | |
| Audio Input Impedance | | 600 Ω or 10 kΩ | |
| Digital Input Impedance | | 110 Ω | |





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40138 Bologna Italy

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| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TX02KSS/61D112B | Modular transmitter, 2KW (composed of HC2 + 2x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX100DDS). |
| TX03KSS/61D113B | Modular transmitter, 3KW (composed of HC3 + 3x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX100DDS). |
| TX3K5SS/60D121B | Modular transmitter, 3.5KW (composed of 1x PJ3500LCD + SCML1+1SL/V2 + 2x PTX30DDS). |
| TX04KSS/61D114B | Modular transmitter, 4KW (composed of HC4 + 4x PJ1000LIGHT + SCML1+1SL/V2 + 2x PTX100DDS). |
| TX05KSS/61D082B | Modular transmitter, 5KW (composed of HC2 + 2x PJ2500LCD + SCML1+1SL/V2 + 2x PTX100DDS). |
| TX07KSS/61D122B | Modular transmitter, 7KW (composed of HC2 + 2x PJ3500LCD + SCML1+1SL/V2 + 2x PTX100DDS). |
| TX7K5SS/61D083B | Modular transmitter, 7.5KW (composed of HC3 + 3x PJ2500LCD + SCML1+1SL/V2 + 2x PTX100DDS). |
| TX10KSS/62D084B | Modular transmitter, 10KW (composed of HC4 + 4x PJ2500LCD + SCML1+1SL/V2 + 2x PTX150DDS). |
| TX12KSS/62D085B | Modular transmitter, 12KW (composed of HC5+ 5x PJ2500LCD + SCML1+1SL/V2 + 2x PTX150DDS). |
| TX14KSS/62D124B | Modular transmitter, 14KW (composed of HC4+ 4x PJ3500LCD + SCML1+1SL/V2 + 2x PTX150DDS). |
| TX02KSS/61S112 | Modular transmitter, 2KW (composed of HC2 + 2x PJ1000LIGHT + PTX100DDS). |
| TX03KSS/61S113 | Modular transmitter, 3KW (composed of HC3 + 3x PJ1000LIGHT + PTX100DDS). |
| TX3K5SS/60S121 | Modular transmitter, 3.5KW (composed of 1x PJ3500LCD + PTX30DDS). |
| TX04KSS/61S114 | Modular transmitter, 4KW (composed of HC4 + 4x PJ1000LIGHT + PTX100DDS). |
| TX05KSS/61S082 | Modular transmitter, 5KW (composed of HC2 + 2x PJ2500LCD + PTX100DDS). |
| TX07KSS/61S122 | Modular transmitter, 7KW (composed of HC2 + 2x PJ3500LCD + PTX100DDS). |
| TX7K5SS/61S083 | Modular transmitter, 7.5KW (composed of HC3 + 3x PJ2500LCD + PTX100DDS). |
| TX10KSS/62S084 | Modular transmitter, 10KW (composed of HC4 + 4x PJ2500LCD + PTX150DDS). |
| TX12KSS/62S085 | Modular transmitter, 12KW (composed of HC5+ 5x PJ2500LCD + PTX150DDS). |
| TX14KSS/62S124 | Modular transmitter, 14KW (composed of HC4+ 4x PJ3500LCD + PTX150DDS). |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# TX-KSS PLUG-IN

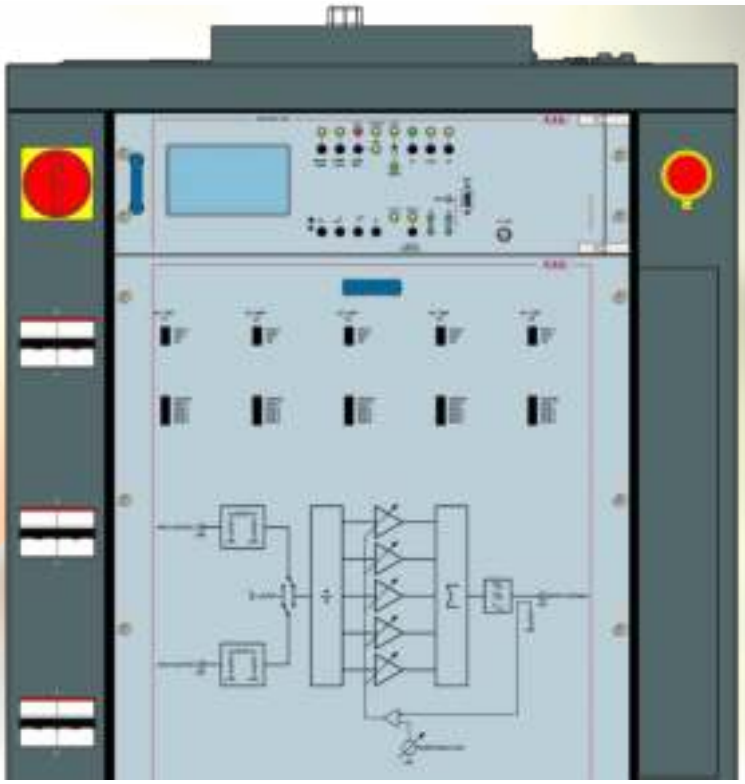
## MID/HIGH POWER HOT PLUG

from 3000W to 60.000W

**Developed for the most demanding FM Radio Networks, this line of products has been conceived for all stations that needs to ensure broadcast continuity and simplify any maintenance operation. All hot pluggable transmitters exceed ETSI/CCIR/FCC standards on RF harmonics and spurious, performing high efficiency and ensuring the clients in investing in product with a high life span.**

MODELS

TX03KSS
TX04KSS
TX05KSS
TX06KSS
TX08KSS
TX10KSS
TX12.5KSS
TX20KSS
TX25KSS
TX32KSS
TX40KSS
TX50KSS
TX60KSS





R.V.R. Elettronica S.r.l.
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40138 Bologna Italy

Phone +39 0516010506
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- **The most reliable FM broadcasting solution on the market designed for 24/7 non-stop operation.**
- **Capable of Analog and Digital transmission depending on the configuration.**
- **Reduced failure rate thanks to hot plug-in connectors replacing most of the classical wiring.**
- **Over-dimensioned amplifiers modules.**
- **In case of fail, the total power output will not go below -3dB.**
- **Independent and hot-swap amplifier's modules.**
- **Intelligent stand alone hot-swap fan arrays.**
- **Overall efficiency up to 76% depending on the configuration.**
- **N+1 Configuration available for 24/7 business continuity.**
- **Built-in exciter's automatic or manual changeover.**
- **Simplified maintenance: common spare parts on the entire series from 3.000W to 60.000W.**
- **Tunable over the entire FM band 87.5 - 108 MHz, without tuning. Other bands on request.**
- **Remote controls: WEB, SNMP2, GSM, Serial and Complete FM monitoring (option).**
- **Exceeds ETSI/CCIR/FCC requirements regarding RF harmonics and RF spurious.**
- **Single phase or three phase power configuration.**

**Exciters:**

- **TEX, PTX Series depending on client's requirements and budget. Single and**
- **Dual Drive with automatic or manual changeover.**
- **Programmable Timing & Priority of all audio inputs depending on configuration.**
- **Fold-back control for effective "VSRW" protection.**
- **Including IAMLC: Intelligent Automatic Modulation Level Control.**
- **Low distortion and intermodulation values.**

**Amplifiers:**

- **Hot Plug-in modules available in 2.300W or 2.500W depending on system's configuration.**
- **Independent power supply per each amplifier's module.**
- **Independent fan array per each amplifier's module.**
- **Automatic Power Control.**
- **Advanced protections against high VSWR, overdrive, overcurrent and overtemperature.**
- **Ease of maintenance.**



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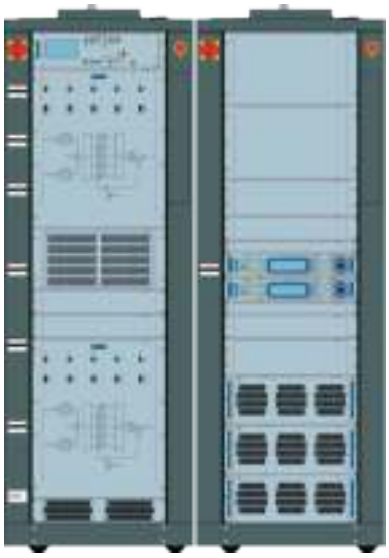
**TX10KSS/60D41**

Plug-in transmitter, 10kW
(composed of PJ10KPS-CA
+ 2x PTX30DDS).



**TX20KSS/61D412**

Plug-in transmitter, 20kW
(composed of PJ20KPS-CA
+ 2x PTX30DDS).

**TX60KSS**

Plug-in transmitter, 60kW
(composed of PJ60KPS-CA
+ 2x PTX30DDS).



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## TX10KSS/60D41

| Parameters | U.M. | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| RF Output Power | kW | 10,5 | |
| Frequency Range | MHz | 87,5 – 108 | |
| Frequency Stability | ppm | > 1 | |
| Frequency programmability | | By software, with 1, 10, 100 , 1000 kHz steps | |
| Nominal Frequency Deviation | | ±75 KHz (peak) | |
| Maximum Frequency Deviation | | ±150 KHz (peak) | |
| Class of Emission | | 180KF8E Direct to Channel | |
| Modulation Mode | | Mono, Stereo, Multiplex, SCA, RDS, Aux | |
| Stereo transmissions | | Acc. to ITU-R / Rec. 450 (Pilot tone) | |
| RF Output Impedance | | 50 Ω, Unbalanced | |
| RF Output Connector | | 1-5/8" EIA Flange | |
| VSWR | | 1.4:1 with automatic fold-back at higher VSWR | |
| Pre-emphasis Mode | | 0/50 (CCIR) µs,75 (FCC) µs | |
| Asynchronous AM S/N Ratio | | Typically >70dB | |
| Synchronous AM S/N Ratio | | Typically > 55dB | |
| Harmonics suppression and Spurious | | Typically <85db | |
| Overall efficiency | | Typically > 70% | |
| RF Harmonics | | Exceeds ETSI/CCIR/FCC requirements | |
| RF Spurious | | Exceeds ETSI/CCIR/FCC requirements | |
| Analogue Input level {+75 Khz (peak) deviation } | | -12,5 dBu - +12,5 dBu (adjustable) | |
| Digital Input level {+75 Khz (peak) deviation } | | -20,0 dBFS – 0 dBFS (adjustable) | |
| **MONO OPERATION** | | | |
| S/N ratio | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise | % | Typically <0,03 | |
| Inter Modulation Distortion SMPTE | % | Typically <0,02 | |
| Frequency Response | dB | Typically ±0,2 | |
| Audio Input Impedance | | 600 Ω or 10 kΩ | |
| **MPX OPERATION** | | | |
| Composite S/N ratio | dB | Typically > 80 | |
| Total Harmonic Distortion + Noise | % | Typically <0,05 | |
| Inter Modulation Distortion | % | Typically <0,05 | |
| Frequency Response | dB | Typically ±0,2 | |
| Audio Input Impedance | | 10 kΩ | |
| **STEREO OPERATION** | | | |
| Stereo FM S/N Ratio | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise (L or R) | % | Typically <0,02 | |
| Inter Modulation Distortion SMPTE (L or R) | % | Typically <0,02 | |
| Frequency response (L or R) | dB | Typically ±0,2 | |
| Linear Cross Talk | dB | Typically > 50 | |
| Non-linear Cross Talk | dB | Typically > 50 | |
| Stereo Separation (Sine Wave) | dB | Typically > 70 | |
| Audio Input Impedance | | 600 Ω or 10 kΩ | |
| Digital Input Impedance | | 110 Ω | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## TX60KSS

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| RF Output Power | | kW | 65 | |
| Frequency Range | | MHz | 87,5 – 108 | |
| Frequency Stability | | ppm | ± 1 | |
| Driver power for rated output | | W | 100 | |
| Nominal Frequency Deviation | | | ±75 KHz (peak) | |
| Maximum Frequency Deviation | | | ±150 KHz (peak) | |
| Class of Emission | | | 180KF8E Direct to Channel | |
| Modulation Mode | | | Mono, Stereo, Multiplex | |
| Stereo transmissions | | | Ace to ITU-R / Ree 450 (Pilot tone) | |
| RF Output Impedance | | Ω | 50 | |
| RF Output Connector | | | 3-1/8" EIA Flange | |
| VSWR | | | 1.4:1 with automatic fold-back at higher VSWR | |
| Pre-emphasis Mode | | | 0/50 (CCIR) µs,75 (FCC) µs | |
| Asynchronous AM S/N Ratio | | dB | Typically >70 | |
| Synchronous AM S/N Ratio | | dB | Typically > 55 | |
| Harmonics suppression and Spurious | | dB | Typically <85 | |
| Overall efficiency | | % | Typically > 72-74 | |
| RF Harmonics | | | Exceeds ETSI/CCIR/FCC requirements | |
| RF Spurious | | | Exceeds ETSI/CCIR/FCC requirements | |
| Analogue Input level {+75 Khz (peak) deviation } | | | -12,5 dBu - +12,5 dBu (adjustable) | |
| Digital Input level {+75 Khz (peak) deviation } | | | -20,0 dBFS – 0 dBFS (adjustable) | |
| **POWER REQUIREMENTS** | | | | |
| AC power input | AC supply voltage | | 400V ±10% AC Three-Phase 3F-N 230V ±10% AC Three-Phase 3F-N | |
| | Active power consumption | | From 29,1 kW to 28,3 kW From 58,3 kW to 56,7 kW From 90 kW to 92 kW | |
| | Overall efficiency | % | Typically > 72-74 | |
| | Power factor | dB | > 0,95 | |
| | Connector | | Terminal Block Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions mm (WxHxD) | | | 3425 x 1910 x 1150 | |
| Cooling | | | Forced, with internal fan | |
| Acoustic Noise | | dba | <75 | |
| Weight | | Kg | About 1150 | |
| **MONO OPERATION** | | | | |
| S/N ratio | | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise | | % | Typically <0,03 | |
| Inter Modulation Distortion SMPTE | | % | Typically <0,02 | |
| Frequency Response | | dB | Typically ±0,2 | |
| Audio Input Impedance | | | 600 Ω or 10 kΩ | |
| **MPX OPERATION** | | | | |
| Composite S/N ratio | | dB | Typically > 80 | |
| Total Harmonic Distortion + Noise | | % | Typically <0,05 | |
| Inter Modulation Distortion | | % | Typically <0,05 | |
| Frequency Response | | dB | Typically ±0,2 | |
| Audio Input Impedance | | kΩ | 10 | |
| **STEREO OPERATION** | | | | |
| Stereo FM S/N Ratio | | dB | Typically > 83 | |
| Total Harmonic Distortion + Noise (L or R) | | % | Typically <0,02 | |
| Inter Modulation Distortion SMPTE (L or R) | | % | Typically <0,02 | |
| Frequency response (L or R) | | dB | Typically ±0,2 | |
| Linear Cross Talk | | dB | Typically > 50 | |
| Non-linear Cross Talk | | dB | Typically > 50 | |
| Stereo Separation (Sine Wave) | | dB | Typically > 70 | |
| Audio Input Impedance | | | 600 Ω or 10 kΩ | |
| Digital Input Impedance | | Ω | 110 | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TX03KSS | Plug-in transmitter, 3kW (composed of PJ3KPS-CA + 2x PTX30DDS). |
| TX04KSS/60D44 | Plug-in transmitter, 4kW (composed of PJ4KPS-CA + 2x PTX30DDS). |
| TX05KSS | Plug-in transmitter, 5kW (composed of PJ5KPS-CA + 2x PTX30DDS). |
| TX06KSS/60D42 | Plug-in transmitter, 6kW (composed of PJ6KPS-CA + 2x PTX30DDS). |
| TX08KSS/60D43 | Plug-in transmitter, 8kW (composed of PJ8KPS-CA + 2x PTX30DDS). |
| TX10KSS/60D41 | Plug-in transmitter, 10kW (composed of PJ10KPS-CA + 2x PTX30DDS). |
| TX12.5KSS/60D41 | Plug-in transmitter, 12.5kW (composed of PJ12.5KPS-CA + 2x PTX30DDS). |
| TX20KSS/61D412 | Plug-in transmitter, 20kW (composed of 2x PJ10KPS-CA + 2x PTX100DDS). |
| TX25KSS/60D451 | Plug-in transmitter, 25kW (composed of PJ20KPS-CA + 2x PTX30DDS). |
| TX32KSS/60D472 | Plug-in transmitter, 32kW (composed of 2x PJ16KPS-CA + 2x PTX30DDS). |
| TX40KSS/61D414 | Plug-in transmitter, 40kW (composed of 4x PJ10KPS-CA + 2x PTX30DDS). |
| TX50KSS | Plug-in transmitter, 50kW (composed of 5x PJ10KPS-CA + 2x PTX30DDS). |
| TX60KSS | Plug-in transmitter, 60kW (composed of 6x PJ10KPS-CA + 2x PTX30DDS). |
| TX03KSS | Plug-in transmitter, 3kW (composed of PJ3KPS-CA + PTX30DDS). |
| TX04KSS/60S44 | Plug-in transmitter, 4kW (composed of PJ4KPS-CA + PTX30DDS). |
| TX05KSS | Plug-in transmitter, 5kW (composed of PJ5KPS-CA + PTX30DDS). |
| TX06KSS/60S42 | Plug-in transmitter, 6kW (composed of PJ6KPS-CA + PTX30DDS). |
| TX08KSS/60S43 | Plug-in transmitter, 8kW (composed of PJ8KPS-CA + PTX30DDS). |
| TX10KSS/60S41 | Plug-in transmitter, 10kW (composed of PJ10KPS-CA + PTX30DDS). |
| TX12.5KSS/60S41 | Plug-in transmitter, 12.5kW (composed of PJ12.5KPS-CA + PTX30DDS). |
| TX20KSS/61S412 | Plug-in transmitter, 20kW (composed of 2x PJ10KPS-CA + PTX100DDS). |
| TX25KSS/60S451 | Plug-in transmitter, 25kW (composed of PJ20KPS-CA + PTX30DDS). |
| TX32KSS/60S472 | Plug-in transmitter, 32kW (composed of 2x PJ16KPS-CA + PTX30DDS). |
| TX40KSS/61S414 | Plug-in transmitter, 40kW (composed of 4x PJ10KPS-CA + PTX30DDS). |
| TX50KSS | Plug-in transmitter, 50kW (composed of 5x PJ10KPS-CA + PTX30DDS). |
| TX60KSS | Plug-in transmitter, 60kW (composed of 6x PJ10KPS-CA + PTX30DDS). |



R.V.R. Elettronica S.r.l.
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# TX-KSS PLUG-IN NEXT GEN

FULL PLUG-IN

## MID/HIGH POWER HOT PLUG

from 4000W to 50000W

**R.V.R. has opted to enhance the power supply feed within the Hot Plug-in Standard Series by developing the EPS (Extractable Power Supplies) features, employing a drawer system for hot-swappable power supplies, and incorporating an additional slot for N+1 PSU configuration.**
**In response to the growing demand for rapid maintenance, reduced downtime, and redundancy across various points in the transmitter, R.V.R. has decided to introduce a solution that allows for the integration of power supplies from different manufacturers. This flexibility accommodates client preferences, budgetary constraints, and operational requirements in specific Countries.**

MODELS

TX04KSS TX05KSS TX06KSS
TX08KSS TX10KSS TX12.5KSS



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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Fax +39 0516011104
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**Developed for the most demanding FM Radio Networks, this line of products has been conceived for all stations that needs to ensure broadcast continuity and simplify any maintenance operation. All hot pluggable transmitters exceed ETSI/CCIR/FCC standards on RF harmonics and spurious, performing high efficiency and ensuring the clients in investing in product with a high life span.**

- **Tunable over entire FM band (87.5 – 108 MHZ), without tuning.**
- **Overall efficiency better than 71-73%.**
- **Hot-pluggable and broadband power amplifier modules.**
- **High redundancy guaranteed**
- **Each amplifier module provides Automatic Power Control.**
- **Each module has its own hot plug-in fans set.**
- **Suitable for mono & stereo broadcast operations.**
- **Protection against high VSWR, overdrive, overcurrent and overtemperature.**
- **Compliance to IEC safety standards.**
- **Compliance to ETSI – CCIR – FCC standards.**
- **Entire transmitter can be switched off through an emergency button.**
- **All measurement and working parameters are displayed on front panel.**
- **Remotely controllable by telemetry system.**
- **Design for 24/7 non-stop operation.**
- **The transmitter include an integrated system for automatic and manual switching between two exciters. In Automatic mode the changeover is activated when active power of exciter falls below 3dB.**

## EPS

Switching Power supply for RF module.
Very easy to replace, even when the transmitter is on air.

**• Each power supply “PS" can be removed or plugged without turning off the transmitter.**
**• The transmitter is capable of generating an output power with ampie margin thanks to oversized power supplies.**
**• By installing an additional PS, the transmitter will operate at full power in the event of a single PS failure,**
**eliminating the need for derating.**
**• Each PS features an automatic magnetic switch preventing short circuits and ensuring uninterrupted signal**
**broadcasting.**
**• The power stream generated by these PS are distributed in parallel to all RF modules; consequently if one**
**power supply fails all RF modules maintain balanced operation.**
**• The transmitter’s CCU oversee continuously the operational status of each individual power supply.**
**• In the event of a failure the "ECM" electronic control module will optimize the transmitter efficiency.**
**• In an empty slot an additional power supply can be turned on so in the event of a power supply failure there will be no reduction in power. It is a N+1 pws system . Only from 4 to 10kW(option).**



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40138 Bologna Italy

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### TX06KSS/60D42/EPS

Plug-in transmitter, 6kW
(composed of PJ6KPS-CA +
2x PTX30DDS) with EPS "Extractable Power Supplies.

### TX08KSS/60D43/EPS

Plug-in transmitter, 8kW
(composed of PJ8KPS-CA +
2x PTX30DDS) with EPS "Extractable Power Supplies.

### TX10KSS/60D41/EPS

Plug-in transmitter, 10kW
(composed of PJ10KPS-CA +
2x PTX30DDS) with EPS "Extractable Power Supplies.

### TX12.5KSS/60D41/EPS

Plug-in transmitter, 12.5kW
(composed of PJ12.5KPS-CA +
2x PTX30DDS) with EPS "Extractable Power Supplies.

## TX06KSS/60D42/EPS

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **RF Output Power** | | | 6kW + 10% | |
| **Frequency Range** | | MHz | 87,5 – 108 | |
| **Driver power for rated output** | | W | 30 | |
| **VSWR** | | | 1.4:1 with automatic fold-back at higher VSWR | |
| **Asynchronous AM S/N Ratio** | | | Typically >70dB | |
| **Synchronous AM S/N Ratio** | | | Typically > 55dB | |
| **Harmonics suppression and Spurious** | | | Typically <85db | |
| **RF Harmonics** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **RF Spurious** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **Environmental working conditions** | | | -10 °C to + 50 °C / 95% relative Humidity non condensing | |
| **POWER REQUIREMENTS** | | | | |
| **AC Power Input** | AC Supply Voltage | | 400V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Mono-Phase 50/60 Hz | |
| | Active Power Consuption | | about 8350W | |
| | Power factor | | > 0.95 | |
| | Overall Efficiency | | 71/73 % | |
| | Connector | | Terminal Block Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical Dimensions** | | L x H x W | 40u 685 mm x 1935 mm x 1000 mm | |
| | | | 32u 685 mm x 1620 mm x 1000 mm | |
| **Weight** | | | about 260 kg | |
| **Cooling** | | | Forced, with internal fan | |
| **Acoustic Noise** | | | < 75 dBA | |
| **OUTPUTS** | | | | |
| **RF Output** | | | 50 Ohm (1+5/8" EIA flange type) | |

## TX08KSS/60D43/EPS

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **RF Output Power** | | | 8kW + 10% | |
| **Frequency Range** | | MHz | 87,5 – 108 | |
| **Driver power for rated output** | | W | 30 | |
| **VSWR** | | | 1.4:1 with automatic fold-back at higher VSWR | |
| **Asynchronous AM S/N Ratio** | | | Typically >70dB | |
| **Synchronous AM S/N Ratio** | | | Typically > 55dB | |
| **Harmonics suppression and Spurious** | | | Typically <85db | |
| **RF Harmonics** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **RF Spurious** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **Environmental working conditions** | | | -10 °C to + 50 °C / 95% relative Humidity non condensing | |
| **POWER REQUIREMENTS** | | | | |
| **AC Power Input** | AC Supply Voltage | | 400V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Mono-Phase 50/60 Hz | |
| | Active Power Consuption | | about 11.100W | |
| | Power factor | | > 0.95 | |
| | Overall Efficiency | | 71/73 % | |
| | Connector | | Terminal Block Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical Dimensions** | | L x H x W | 40u 685 mm x 1935 mm x 1000 mm | |
| | | | 32u 685 mm x 1620 mm x 1000 mm | |
| **Weight** | | | about 290 kg | |
| **Cooling** | | | Forced, with internal fan | |
| **Acoustic Noise** | | | < 75 dBA | |
| **OUTPUTS** | | | | |
| **RF Output** | | | 50 Ohm (1+5/8" EIA flange type) | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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Fax +39 0516011104
sales@rvr.it - www.rvr.it

## TX10KSS/60D41/EPS

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **RF Output Power** | | | 10kW + 10% | |
| **Frequency Range** | | MHz | 87,5 – 108 | |
| **Driver power for rated output** | | W | 30 | |
| **VSWR** | | | 1.4:1 with automatic fold-back at higher VSWR | |
| **Asynchronous AM S/N Ratio** | | | Typically >70dB | |
| **Synchronous AM S/N Ratio** | | | Typically > 55dB | |
| **Harmonics suppression and Spurious** | | | Typically <85db | |
| **RF Harmonics** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **RF Spurious** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **Environmental working conditions** | | | -10 °C to + 50 °C / 95% relative Humidity non condensing | |
| **POWER REQUIREMENTS** | | | | |
| **AC Power Input** | AC Supply Voltage | | 400V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Mono-Phase 50/60 Hz | |
| | Active Power Consuption | | about 14.100W | |
| | Power factor | | > 0.95 | |
| | Overall Efficiency | | 71/73 % | |
| | Connector | | Terminal Block Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical Dimensions** | | L x H x W | 40u 685 mm x 1935 mm x 1000 mm | |
| | | | 32u 685 mm x 1620 mm x 1000 mm | |
| **Weight** | | | about 360 kg | |
| **Cooling** | | | Forced, with internal fan | |
| **Acoustic Noise** | | | < 75 dBA | |
| **OUTPUTS** | | | | |
| **RF Output** | | | 50 Ohm (1+5/8" EIA flange type) | |

## TX12.5KSS/60D41/EPS

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **RF Output Power** | | | 12.5kW + 10% | |
| **Frequency Range** | | MHz | 87,5 – 108 | |
| **Driver power for rated output** | | W | 30 | |
| **VSWR** | | | 1.4:1 with automatic fold-back at higher VSWR | |
| **Asynchronous AM S/N Ratio** | | | Typically >70dB | |
| **Synchronous AM S/N Ratio** | | | Typically > 55dB | |
| **Harmonics suppression and Spurious** | | | Typically <85db | |
| **RF Harmonics** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **RF Spurious** | | | Exceeds ETSI/CCIR/FCC requirements | |
| **Environmental working conditions** | | | -10 °C to + 50 °C / 95% relative Humidity non condensing | |
| **POWER REQUIREMENTS** | | | | |
| **AC Power Input** | AC Supply Voltage | | 400V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Three-Phase 3F+N | |
| | | | 230V ±10% AC Mono-Phase 50/60 Hz | |
| | Active Power Consuption | | about 17.200W | |
| | Power factor | | > 0.95 | |
| | Overall Efficiency | | 71/73 % | |
| | Connector | | Terminal Block Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical Dimensions** | | L x H x W | 40u 685 mm x 1935 mm x 1000 mm | |
| | | | 32u 685 mm x 1620 mm x 1000 mm | |
| **Weight** | | | about 380 kg | |
| **Cooling** | | | Forced, with internal fan | |
| **Acoustic Noise** | | | < 75 dBA | |
| **OUTPUTS** | | | | |
| **RF Output** | | | 50 Ohm (1+5/8" EIA flange type) | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

| ORDERING INFORMATION | |
|---|---|
| **Model** | **Description** |
| TX04KSS/60D44/EPS | Plug-in transmitter, 4kW (composed of PJ4KPS-CA + 2x PTX30DDS) with EPS "Extractable Power Supplies". |
| TX06KSS/60D42/EPS | Plug-in transmitter, 6kW (composed of PJ6KPS-CA + 2x PTX30DDS) with EPS "Extractable Power Supplies". |
| TX08KSS/60D43/EPS | Plug-in transmitter, 8kW (composed of PJ8KPS-CA + 2x PTX30DDS) with EPS "Extractable Power Supplies". |
| TX10KSS/60D41/EPS | Plug-in transmitter, 10kW (composed of PJ10KPS-CA + 2x PTX30DDS) with EPS "Extractable Power Supplies". |
| TX12.5KSS/60D41/EPS | Plug-in transmitter, 12.5kW (composed of PJ12.5KPS-CA + 2x PTX30DDS) with EPS "Extractable Power Supplies". |
| TX04KSS/60S44/EPS | Plug-in transmitter, 4kW (composed of PJ4KPS-CA + PTX30DDS) with EPS "Extractable Power Supplies". |
| TX06KSS/60S42/EPS | Plug-in transmitter, 6kW (composed of PJ6KPS-CA + PTX30DDS) with EPS "Extractable Power Supplies". |
| TX08KSS/60S43/EPS | Plug-in transmitter, 8kW (composed of PJ8KPS-CA + PTX30DDS) with EPS "Extractable Power Supplies". |
| TX10KSS/60S41/EPS | Plug-in transmitter, 10kW (composed of PJ10KPS-CA + PTX30DDS) with EPS "Extractable Power Supplies". |
| TX12.5KSS/60S41/EPS | Plug-in transmitter, 12.5kW (composed of PJ12.5KPS-CA + PTX30DDS) with EPS "Extractable Power Supplies". |

| OPTION | |
|---|---|
| /N+1 PSL | An additional power supply can be turned on so in the event of a power supply failure there will be no reduction in power. |





R.V.R. Elettronica S.r.l.
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40138 Bologna Italy

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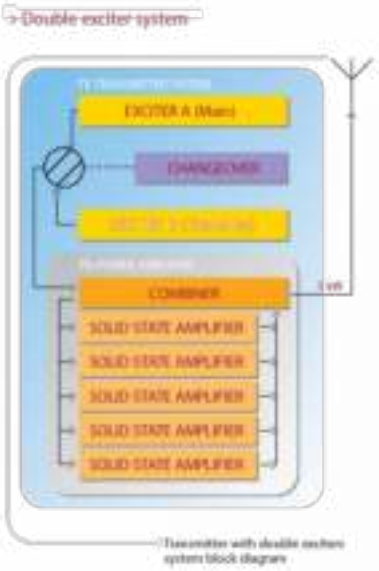
sales@rvr.it - www.rvr.it

# REDUNDANT TRANSMITTERS SYSTEM

## Configuration examples for redundant transmission systems.

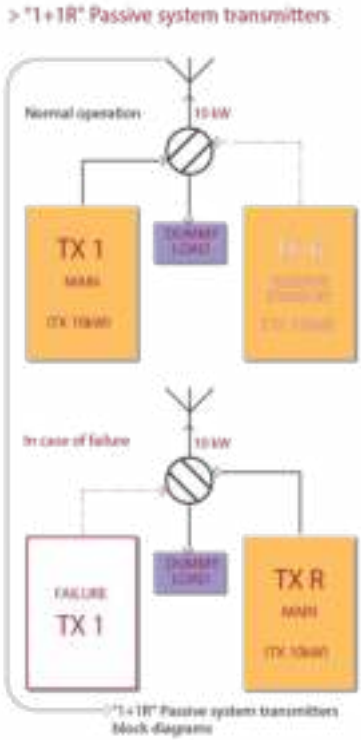
## Double exciter

**This system is composed of 2 exciters A and B, in which one is ON and the other is OFF. In case the unit that is on fails, it will be replaced by the second unit.**




# "1+1R" Passive system transmitters

**This system is composed of 2 transmitters, A and B, inwhich 1 is ON and is connected to the antenna and the second is OFF and is connected to the dummy load. Incase the operating transmitter fails, it is immediately replaced with the second unit.**



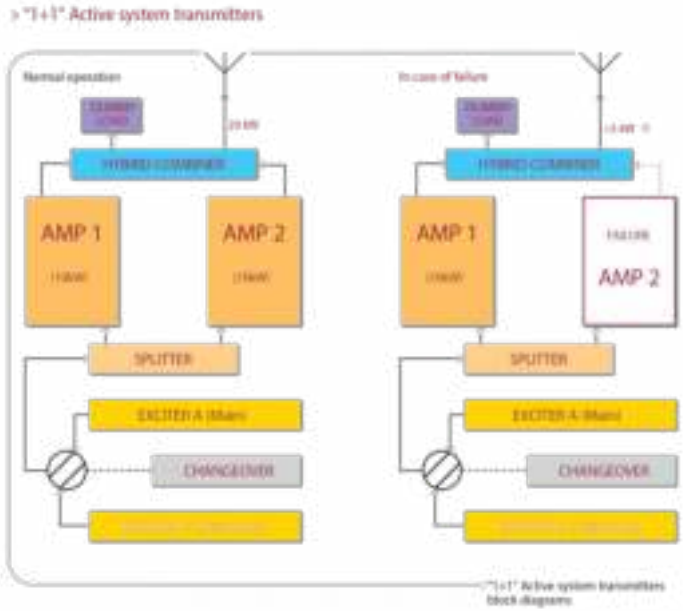



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

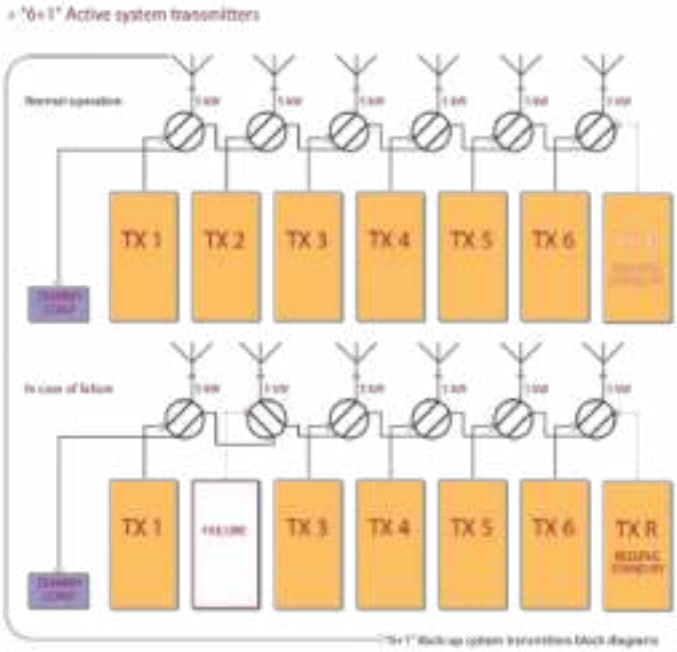
# "1+1R" Active system transmitters

**This system is composed of 2 transmitters, A and B, in which 1 is ON and is connected to the antenna and the second is OFF and is connected to the dummy load. In case the operating transmitter fails, it is immediately replaced with the second unit.**




# "6+1R" Activesystem transmitters

**This system is composed of “N” transmitters connected to the antenna and 1 transmitter used as back-up unit that is connected to the dummy load.In case one of the “N” transmitters fails it is immediately replaced with the back-up unit and the faulty unit is switched to the dummy load.**





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy
Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# FM AMPLIFIERS

BRODBAND AIR COOLED AMPLIFIERS

- **Ideal as a complement for stations of medium-high power.**
- **Globally recognized as the most sold professional amplifiers.**
- **Full compliance with EC, FCC and CCIR standards.**
- **Standard Frequency Range: 87.5 - 108 MHz. Other bands on request.**
- **10% - 100% Output Power continuously adjustable.**
- **From 1000W to 60.000W.**

# PJ-LIGHT PJ-LCD SERIES

## BROADBAND AIR COOLED AMPLIFIERS

from 1000W to 3500W

MODELS

## PJ1000LIGHT PJ2500LCD PJ3500LCD



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

- **High-gain amplifier with very low input drive power requirement.**
- **10% - 100% Output Power continuously adjustable.**
- **APC Automatic Power Control ensuring reliable operation.**
- **Enhanced energy saving power supply.**
- **Exceed 70% efficiency across the bandwidth.**
- **Remotable from all digital RVR telemetry systems.**
- **Full compliance with EC, FCC and CCIR standards.**
- **Ease of access and simplified maintenance.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| PJ1000LIGHT | **1000W** High Redundancy Compact Stereo Amplifier. |
| PJ2500LCD | **2500W** Compact Stereo Amplifier. |
| PJ3500LCD | **3500W** Compact Stereo Amplifier. |

| OPTION | |
|---|---|
| /CNT7/8-150 | 7/8 output RF connector. |

## PJ1000LIGHT

**1000W** High Redundancy Compact Amplifier.

## PJ2500LCD

**2500W** Compact Amplifier.

## PJ3500LCD

**3500W** Compact Amplifier.



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sales@rvr.it - www.rvr.it

## PJ1000LIGHT

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Frequency range | | MHz | 87,5 ÷ 108 | |
| Rated output power | | W | 1000 | |
| Spurious & harmonic suppression | | dBc | <75 (80 typical) | Meets or exceeds all FCC and CCIR rules |
| Working temperature | | °C | -5 to + 50 | |
| Working humidity | | % | 95 | Without condensing |
| Working altitude | | m | Up to 3000 | With adequate air evacuation system in site |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | VAC | 230 ±15% | |
| | AC Apparent Power Consumption | VA | 1650 | Monophase |
| | Active Power Consumption | W | 1630 | |
| | Power Factor | | 0,998 | |
| | Overall Efficiency | % | Typical 70 | |
| | Connector | | Terminal Block | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | EIA rack |
| | Front panel height | mm / inch | 132 / 5 1/4 3HE | |
| | Overall depth | mm / inch | 550 / 21,65 | |
| | Chassis depth | mm / inch | 500 / 19,69 | |
| Weight | | kg | About 25 | |
| Cooling | | | Forced, with internal fan | |
| Acoustic noise | | dBA | < 75 | Leq 3 min @ 1 m |
| **AUDIO INPUTS** | | | | |
| RF Input | Connector | | N type | |
| | Impedance | Ohm | 50 | |
| Driver power for rated output | | W | 11 | |
| Max input power before protection | | W | 25 | |
| **OUTPUTS** | | | | |
| RF Output | Connector | | 7/16" EIA | |
| | Impedance | Ohm | 50 | |
| RF Monitor | Connector | | BNC | |
| | Impedance | Ohm | 50 | |
| | Output Level | dBc | Approx. -60 | |
| **FUSES** | | | | |
| On mains | | | 2 External fuse F 25 T - 10x38 mm | |
| On services | | | 1 External F3,15 A 2x20 mm | |
| On PA Supply | | | 3External F 16 A 10x38mm | |
| On aux VDE socket | | | X | |

| | | | PJ2500LCD | PJ3500LCD | |
|---|---|---|---|---|---|
| **Parameters** | | U.M. | Value | | Notes |
| **GENERALS** | | | | | |
| **Frequency range** | | MHz | 87,5 ÷ 108 | | |
| **Rated output power** | | W | 2500 | 3500 | |
| **Modulation type** | | dBc | <80 (82 typical) | <82 (85 typical) | Meets or exceeds all FCC and CCIR rules |
| **Working temperature** | | °C | -5 to + 50 | | |
| **Working humidity** | | % | 95 | | Without condensing |
| **Working altitude** | | m | Up to 3000 | Up to 2000 | With adequate air evacuation system in site |
| **POWER REQUIREMENTS** | | | | | |
| **AC Power input** | AC Supply Voltage | VAC | 230 ±15% | 230 +10% -15% \| 400 +10% -15% | Monophase \| Threephases Y |
| | AC Apparent Power Consumption | VA | 3578 | 4996 | |
| | Active Power Consumption | W | 3571 | 4987 | |
| | Power Factor | | 0,998 | | |
| | Overall Efficiency | % | Typical 70 | | |
| | Connector | | Terminal Block | | |
| **MECHANICAL DIMENSIONS** | | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | | EIA rack |
| | Front panel height | mm / inch | 132 / 3 1/2 3HE | | |
| | Overall depth | mm | 670 | | |
| | Chassis depth | mm | 650 | | |
| **Weight** | | kg | About 31 | | |
| **Cooling** | | | Forced, with internal fan | | |
| **Acoustic noise** | | dBA | < 75 | | Leq 3 min @ 1 m |
| **AUDIO INPUTS** | | | | | |
| **RFInput** | Connector | | N type | | |
| | Impedance | Ohm | 50 | | |
| **Driver power for rated output** | | W | 30 | | |
| **Max input power before protection** | | W | 35 | | |
| **OUTPUTS** | | | | | |
| **RF Output** | Connector | | 7/8" EIA | | |
| | Impedance | Ohm | 50 | | |
| **RF Monitor** | Connector | | BNC | | |
| | Impedance | Ohm | 50 | | |
| | Output Level | dBc | Approx. -60 | | |
| **FUSES** | | | | | |
| **On mains** | | | 3 External fuse F 25 T - 10x38 mm | 3 External fuse F 10 T - 6x30 mm | |
| **On services** | | | 1 External F3,15 A 5x20 mm | X | |
| **On PA Supply** | | | 4 Internal F 25 A 10x38mm | 4 Internal F 32 A 10x38mm | |
| **On aux VDE socket** | | | X | X | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

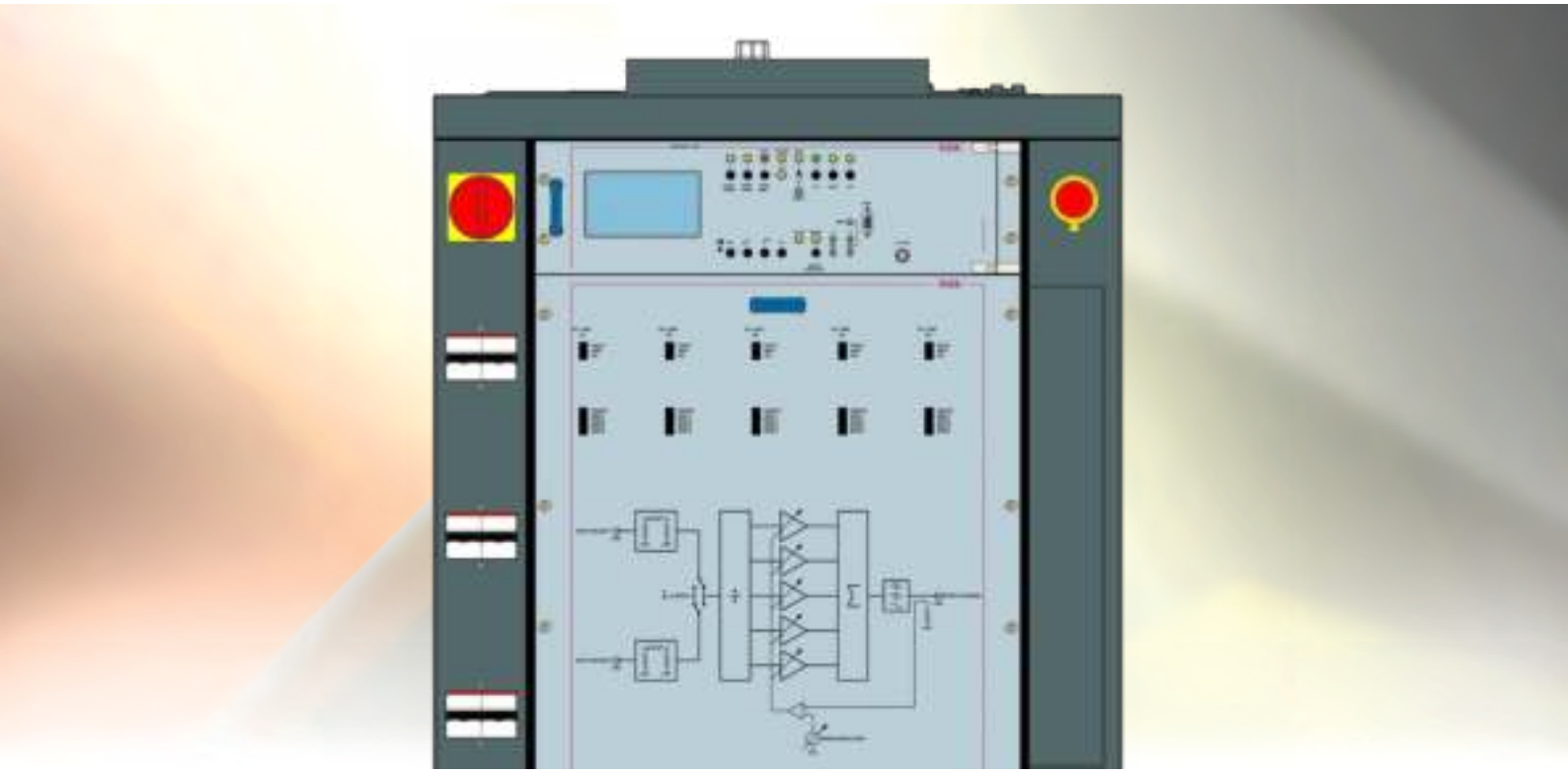
# PJ-KPS-CA PLUG-IN SERIES

## MID/HIGH POWER HOT PLUG

from 3000W to 60.000W

MODELS

PJ03KPS-CA
PJ04KPS-CA
PJ05KPS-CA
PJ06KPS-CA
PJ08KPS-CA
PJ10KPS-CA
PJ12.5KPS-CA
PJ20KPS-CA
PJ25KPS-CA
PJ32KPS-CA
PJ40KPS-CA
PJ50KPS-CA
PJ60KPS-CA



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

- **The most reliable FM broadcasting solution on the market designed for 24/7 non-stop operation.**
- **Capable of Analog and Digital transmission depending on the configuration.**
- **Reduced failure rate thanks to hot plug-in connectors replacing most of the classical wiring.**
- **Over-dimensioned amplifiers modules.**
- **In case of fail, the total power output will not go below -3dB.**
- **Independent and hot-swap amplifier's modules.**
- **Intelligent stand alone hot-swap fan arrays.**
- **Overall efficiency up to 76% depending on the configuration.**
- **N+1 Configuration available for 24/7 business continuity.**
- **Built-in exciter's automatic or manual changeover.**
- **Tunable over the entire FM band 87.5 - 108 MHz, without tuning. Other bands on request.**
- **Remote controls: WEB, SNMP2, GSM, Serial and Complete FM monitoring (option).**
- **Exceeds ETSI/CCIR/FCC requirements regarding RF harmonics and RF spurious.**
- **Compliance to IEC 215 safety standards.**
- **Single phase or three phase power configuration.**

**Amplifiers:**

- **Hot Plug-in modules available in 2.300W or 2.500W depending on system's configuration**
- **Independent power supply per each amplifier's module.**
- **Independent fan array per each amplifier's module.**
- **Automatic Power Control.**
- **Advanced protections against high VSWR, overdrive, overcurrent and overtemperature.**



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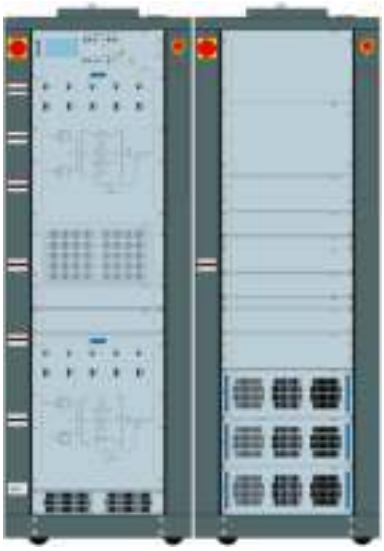
### PJ10KPS-CA

**10.000W** PLUG-IN System.



### PJ20KPS-CA

**20.000W** PLUG-IN system.

### PJ60KPS-CA

**60.000W** PLUG-IN System.

## PJ10KPS-CA

| Parameters | U.M. | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| RF Output Power | kW | 10,5 | |
| Frequency Range | MHz | 87,5 – 108 | |
| Frequency Stability | ppm | > 1 | |
| Class of Emission | | 180KF8E Direct to Channel | |
| Stereo transmissions | | Acc. to ITU-R / Rec. 450 (Pilot tone) | |
| RF Output Impedance | | 50 Ω, Unbalanced | |
| RF Output Connector | | 1-5/8" EIA Flange (3-1/8" EIA Flange on request) | |
| VSWR | | 1.4:1 with automatic fold-back at higher VSWR | |
| Asynchronous AM S/N Ratio | dB | Typically > 70 | |
| Synchronous AM S/N Ratio | dB | Typically > 55 | |
| Harmonics suppression and Spurious | dB | Typically < 85 | |
| Overall efficiency | % | Typically > 70 | |
| RF Harmonics | | Exceeds ETSI/CCIR/FCC requirements | |
| RF Spurious | | Exceeds ETSI/CCIR/FCC requirements | |

## PJ60KPS-CA

| Parameters | U.M. | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| RF Output Power | kW | 65 | |
| Frequency Range | MHz | 87,5 – 108 | |
| Frequency Stability | ppm | ± 1 | |
| Class of Emission | | 180KF8E Direct to Channel | |
| Stereo transmissions | | Ace to ITU-R / Ree 450 (Pilot tone) | |
| RF Output Impedance | Ω | 50 | |
| RF Output Connector | | 4-7/2" EIA Flange (4-1/2" EIA Flange on request) | |
| VSWR | | 1.4:1 with automatic fold-back at higher VSWR | |
| Asynchronous AM S/N Ratio | dB | Typically > 70 | |
| Synchronous AM S/N Ratio | dB | Typically > 55 | |
| Harmonics suppression and Spurious | dB | Typically < 85 | |
| Overall efficiency | % | Typically > 72-74 | |
| RF Harmonics | | Exceeds ETSI/CCIR/FCC requirements | |
| RF Spurious | | Exceeds ETSI/CCIR/FCC requirements | |

## ORDERING INFORMATION

| Model | Description |
|---|---|
| PJ03KPS-CA | **3.000W** PLUG-IN System. |
| PJ04KPS-CA | **4000W** PLUG-IN System. |
| PJ05KPS-CA | **5.000W** PLUG-IN System. |
| PJ06KPS-CA | **6.000W** PLUG-IN System. |
| PJ08KPS-CA | **8.000W** PLUG-IN System. |
| PJ10KPS-CA | **10.000W** PLUG-IN System. |
| PJ12.5KPS-CA | **12.500W** PLUG-IN System. |
| PJ20KPS-CA | **20.000W** PLUG-IN System. |
| PJ25KPS-CA | **25.000W** PLUG-IN System. |
| PJ32KPS-CA | **32.000W** PLUG-IN System. |
| PJ40KPS-CA | **40.000W** PLUG-IN System. |
| PJ50KPS-CA | **50.000W** PLUG-IN System. |
| PJ60KPS-CA | **60.000W** PLUG-IN System. |





R.V.R. Elettronica S.r.l.
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40138 Bologna Italy

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# RADIO LINKS

PTRL - RXRLXRL

**Line of Radio Links covering the frequency bands from 200 MHz to 2.5 GHz with an adjustable power from 2 to 20W and various optional accessories (specify the working frequency when ordering).**

# PTRL - RXRL

## RADIO LINKS SYSTEM

**Line of Radio Links covering the frequency bands from 200 ÷ 400 MHz and from 800 ÷ 960 MHz with an adjustable power from 0 to 20W and various optional accessories.**

MODELS

PTRL-LCD RXRL-LCD



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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Fax +39 0516011104
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- **STL robust and reliable, simple to use.**
- **Standard working frequency bands that include, depending on the model, the VHF-UHF (200 ÷ 400, 800 ÷ 960 MHz) bands.**
- **Optional stereo coder and decoder.**
- **Adjustable output power 2 ÷ 20W on PTRL-LCD transmission.**
- **Agile frequency on 20MHz, selectable a step of 5kHz.**
- **Excellent transmission quality with low distortion and intermodulation.**
- **Full range power supply 80-260 VAC.**
- **Connector for external 24 VDC backup.**
- **APC automatic power control.**
- **Reduced maintenance.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| PTRL-LCD | 20W Radio Link TX 940÷960 MHz in step of 20 MHz factory limited. Please specify the operating frequency at the order. |
| RXRL-LCD | Radio Link RX 940÷960 MHz in step of 20 MHz factory limited. Please specify the operating frequency at the order. |

| OPTION | |
|---|---|
| /S-PTRLLCD | Stereo coder card. |
| /05-RXRLLCD | Stereo decoder card. |

## PTRL-LCD

**20W** Radio Link TX 940÷960 MHz in step of 20 MHz factory limited.

## RXRL-LCD

Radio Link RX 940÷960 MHz in step of 20 MHz factory limited.



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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## PTRL-LCD

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **Frequency range** | Work bandwith is 20MHz | MHz | 940 ÷ 960 | |
| **Rated output power** | | W | 20 | Continuously adjustable from 10 to 100% |
| **Modulation type** | | | Direct carrier frequency | |
| **Operational mode** | | | Mono, Multiplex | |
| **Ambient working temperature** | | °C | -10 to +50 | Without condensing |
| **Frequency setting** | | kHz | 10 | Steps |
| **Frequency stability** | Temperature range from -10°C to 50°C | ppm | ±1 | |
| **Modulation capability** | Refered @ 0dBu for 75kHz | kHz | 130 | Meets or exceeds all FCC and CCIR rules |
| **Pre-emphasis** | | µS | 0, 50 (CCIR), 75 (FCC) | Selectable |
| **Spurious & harmonic suppression** | | dBc | <73 | |
| **Asynchronous AM S/N ratio** | Referred to 100% AM, with no de-emphasis | dB | ≥60 | |
| **Synchronous AM S/N ratio** | Referred to 100% AM, FM deviation 75 kHz | dB | ≥50 | |
| **POWER REQUIREMENTS** | by 400Hz sine, without de-emphasis | | | |
| **AC Power input** | AC Supply Voltage | VAC | 80 ÷260 | Full range |
| | AC Apparent Power Consumption | VA | 120 | |
| | Active Power Consumption | W | 70 | |
| | Power Factor | | 0,5 | |
| | Overall Efficiency | % | Typical 50 | |
| | Connector | | VDE IEC Standard | |
| **DC Power input** | DC Supply Voltage | VDC | 24 | |
| | DC Current | ADC | 5 | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical dimensions** | Front panel width | mm / inch | 483 / 19 | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 | 2HE |
| | Overall depth | mm | 394 | |
| | Chassis depth | mm | 372 | |
| **Weight** | | kg | About 7 | |
| **Cooling** | | | Forced, with internal fan | |
| **Acoustic noise** | | dBA | < 58 | |
| **AUDIO INPUTS** | | | | |
| **Left / Mono** | Connector | | XLR F | |
| | Type | | Balanced | |
| | Impedance | Ohm | 10 k or 600 | |
| | Input Level /Adjust | dBu | -13 to +13 | Continuosly adjustable |
| **Right** | Connector | | XLR F | |
| | Type | | Balanced | |
| | Impedance | Ohm | 10 k or 600 | |
| | Input Level | dBu | -13 to +13 | Continuosly adjustable |
| **MPX** | Connector | | BNC | |
| | Type | | Unbalanced | |
| | Impedance | Ohm | 10 k or 50 | |
| | Input Level / Adjust | dBu | -13 to +13 | Continuosly adjustable |
| **SCA/RDS** | Connector | | 2 x BNC | |
| | Type | | Unbalanced | |
| | Impedance | Ohm | 10 k | |
| | Input Level / Adjust | dBu | -8 to +13 | For 7,5 KHz FM, adjustable |
| **OUTPUTS** | | | | |
| **RF Output** | Connector | | N type | |
| | Impedance | Ohm | 50 | |
| **RF Monitor** | Connector | | BNC | |
| | Impedance | Ohm | 50 | |
| | Output Level | dB | Approx. -30 | |
| **Pilot output** | Connector | | X | |
| | Load Impedance | Ohm | X | |
| | Output Level | Vpp | X | Sinusoidal |
| **FUSES** | | | | |
| **On mains** | | | 1 External fuse F 3,15 T - 5x20 mm | |
| **On services** | | | X | |
| **On PA Supply** | | | X | |
| **On driver supply** | | | X | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**RXRL-LCD**

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Frequency range | Work bandwith is 20MHz | MHz | 940 ÷ 960 | |
| Sensitivity RF | @ 25dB S/N Mono | W | -85 | Continuously adjustable from 10 to 100% |
| Intermediate frequency | | | 70 , 10,7 , 0,35 | |
| Operational mode | | | Mono, Multiplex | |
| Ambient working temperature | | °C | -10 to +50 | Without condensing |
| Frequency setting | | kHz | 10 | Steps |
| Frequency stability | Temperature range from -10°C to 50°C | ppm | ±1 | |
| De-emphasis | | µS | 0 , 50 , 75 | Meets or exceeds all FCC and CCIR rules |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | VAC | 80 ÷260 | Full range |
| | AC Apparent Power Consumption | VA | 25 | |
| | Active Power Consumption | W | 20 | |
| | Power Factor | | 0,8 | |
| | Overall Efficiency | % | Typical 50 | |
| | Connector | | VDE IEC Standard | |
| DC Power input | DC Supply Voltage | VDC | 24 | |
| | DC Current | ADC | < 2 A | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | EIA rack |
| | Front panel height | mm / inch | 88 / 3 1/2 | 2HE |
| | Overall depth | mm | 394 | |
| | Chassis depth | mm | 372 | |
| Weight | | kg | About 5 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | X | |
| **AUDIO INPUTS** | | | | |
| RF Input | Connector | | N type | |
| | Impedance | Ohm | 50 | |
| **OUTPUTS** | | | | |
| Left / Mono | Connector | | XLR F | |
| | Type | | Balanced | |
| | Impedance | Ohm | 100 | |
| | Output Level /Adjust @ 75KHz dev | dBu | -10 to +14 | Continuosly adjustable |
| Right | Connector | | XLR F | |
| | Type | | Balanced | |
| | Impedance | Ohm | 100 | |
| | Output Level /Adjust @ 75KHz devl | dBu | -10 to +14 | Continuosly adjustable |
| MPX | Connector | | 2 x BNC | |
| | Type | | Unbalanced | |
| | Impedance | Ohm | 100 | |
| | Output Level /Adjust @ 75KHz dev | dBu | -20 to +13 | For 75 KHz FM, adjustable |
| SCA | Connector | | 2 x BNC | |
| | Type | | Unbalanced | |
| | Impedance | Ohm | 100 | |
| | Output Level /Adjust @ 75KHz dev | dB | -20 to +7 | Value to check for the 7.5KHz deviation |
| **FUSES** | | | | |
| On mains | | | 1 External fuse F 3,15 T - 5x20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# STATIONS ACCESSORIES

**Implementing or making a brand new FM Station nowadays, especially in remote areas can result difficult when it comes to integrate accessories and products from many suppliers. For this reason, R.V.R. designs and manufactures all main accessories needed in a FM Tower, letting its customers having one unique provider, a simplified integration, installation and support.**

**Discover here below the wide range of products developed to increase the Station's redundancy, performances, lowering your on-site maintenance time.**

**CHANGEOVER UNITS SYSTEM**
SCM

**CHANGEOVER ACCESSORIES**
AUD - SCM - RDS

**RDS & AUDIO EQUIPMENTS**
AUD - RDS

**GPS RECEIVER**
GPSRXNV

**DUMMY LOADS**
EDL-FM

**TELEMETRY SYSTEM**
TLK - /TLW-E

# CHANGEOVER UNITS SYSTEM

## SCM

MODELS

SCMLCD1+1 SCML1+1SL SCMLCDN+1

SCMMAN1+1/158 SCM6-1



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
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**To ensure the continuity of transmission of the transmitting equipment, RVR produces various models of changeover units for the control of redundant configurations in 1 + 1 and N + 1 up to 6 + 1.**

**By integrating coaxial relays, distributors and Audio, MPX and RDS routers, it is thus possible to manually or automatically switch the reserve transmission in case of failure of one of the main ones. Depending on the architecture of the transmitting site, dedicated models are available.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| SCMLCD1+1 | Telemetry automatic changeover unit. |
| OPTION | |
| SCMLCD1+1/T0 | Automatic changeover "1+1" unit and telemetry unit with Nr 1 I/O base card on board. |
| SCMLCD1+1/T1 | Automatic changeover "1+1" unit and telemetry unit with Nr 1 I/O additional card on board. |
| SCMLCD1+1/T2 | Automatic changeover "1+1" unit and telemetry unit with Nr 2 I/O additional cards on board. |
| SCMLCD1+1/T3 | Automatic changeover "1+1" unit and telemetry unit with Nr 3 I/O additional cards on board. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| SCML1+1SL | Compact exchange unit for 1 + 1 systems with coaxial relays of any size. |
| OPTION | |
| SCML1+1SL/V1 | Automatic Changeover "1+1" unit with 4 ways external relay. Power: min 150W max 1kW. Without Telemetry. |
| SCML1+1SL/V2 | Automatic Changeover "1+1" unit with 3 ways internal relay. Power: min 0W max 150W. Without Telemetry. |
| SCML1+1SL/V3 | Automatic Changeover "1+1" unit with 4 ways external relay. Power: from 1kW up. Without Telemetry. |
| SCML1+1SL/V4 | Automatic Changeover "1+1" unit with customized relay. Without Telemetry. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| SCMMAN1+1/158 | Manual changeover function across main and spare transmitter by coaxial relay control panel. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| SCMLCDN+1 | RVR changeover system is equipped with an on-board telemetry unit so that it guarantee utmost continuous service. |
| OPTION | |
| SCMLCDN+1/T0 | Automatic Changeover "N+1" and telemetry unit with No. 2 I/O base cards on board. |
| SCMLCDN+1/T1 | Automatic Changeover "N+1" and telemetry unit with No. 3 I/O base cards on board. |
| SCMLCDN+1/T2 | Automatic Changeover "N+1" and telemetry unit with No. 4 I/O base cards on board. |

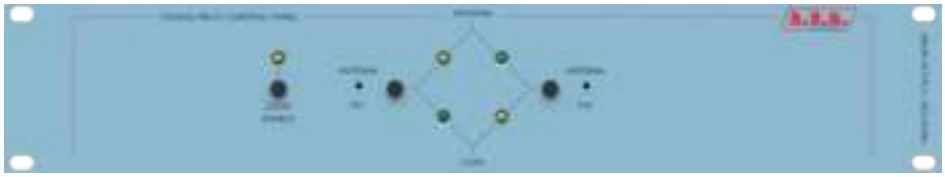
| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| SCM6-1 | Automatic Changeover "N+1", up to 6 transmitters, with integrated telemetry. |

**SCMLCD1+1**

Changeover Units System.

**SCML1+1SL**

Changeover Units System.



**SCMMAN1+1/158**

Changeover Units System.

**SCMLCDN+1**

Changeover Units System.

**SCM6-1**

Changeover Units System.



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## SCMLCD1+1

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Integrated coax-relè | Only / V2 | | Yes | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply voltage | | 115 - 125 - 230 - 250 VAC ±15% | |
| | AC Apparent power consumption | W | | |
| | Connector | | VDE IEC Standard | |
| DC Power input | DC Supply voltage | | 24 VDC | |
| | DC Current | | A | |
| | | | | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 | EIA rack |
| | | mm / inch | 88 / 3 1/2 | 2HE |
| Weight | | kg | About 4 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **AUDIO INPUTS** | | | | |
| Analog | | | 8 ÷ 32 | Analog inputs depending by expansion card number. |
| Digital / Analog | | | 16 ÷ 64 | Digital inputs depending by expansion card number. |
| **OUTPUTS** | | | | |
| Relay | | | 8 ÷ 32 | Analog inputs depending by expansion card number. |
| **FUSES** | | | | |
| On mains | | | 1 External fuse 4 A F - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |

## SCML1+1SL

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Integrated coax-relè | only / V2 | | Yes | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 115 - 125 - 230 - 250 VAC ±15% | |
| | AC Apparent Power Consumption | W | | |
| | Connector | | VDE IEC Standard | |
| DC Power input | DC Supply Voltage | | 24 VDC | |
| | DC Current | | A | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 44 / 3 1/2 | 1HE |
| Weight | | kg | About 0,3 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **AUDIO INPUTS** | | | | |
| Analog | | | Specific RVR connectors | |
| Digital / Analog | | | Specific RVR connectors | |
| **OUTPUTS** | | | | |
| Relay | | | Specific RVR connectors | |
| **INTERFACES** | | | | |
| User interface | | | LCD - 2 x 16 with Encoder | |
| Signalling LEDs / Synoptical | | | Yes | |
| I2C | | | Yes | |
| TC/TS | | | Yes | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse 1,6 A T - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |

## SCMMAN1+1/158

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 115 - 230 VAC ±15% | |
| | AC Apparent Power Consumption | W | 2 | |
| | Connector | | Terminal Block (L-N-PE) | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 | EIA rack |
| | | mm / inch | 88 / 3 1/2 | 2HE |
| Weight | | kg | About 0,3 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **INTERFACES** | | | | |
| Signalling LEDs / Synoptical | LOCAL | mm | Yellow 5 | |
| | TX1 to ANT | mm | 2 x Green 5 | |
| | TX2 to ANT | mm | 2 x Yellow 5 | |
| Push button | LOCAL ENABLE | | Used for enabling change whith push button | |
| | TX1 to ANT | | Used for change Relay in a POS1 | |
| | TX2 to ANT | | Used for change Relay in a POS2 | |
| **AUDIO INPUTS** | | | | |
| Digital | | | Command Switch relay | Terminal Block |
| **OUTPUTS** | | | | |
| Digital | | | Position Switch relay | Terminal Block |
| Digital | | | Out of Position Relay | Terminal Block |
| **FUSES** | | | | |
| On mains | | | 1 Fuse 125mA - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |

## SCMLCDN+1

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Integrated coax-relè | Only / V2 | | Yes | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply voltage | | 115 - 125 - 230 - 250 VAC ±15% | |
| | AC Apparent power consumption | W | | |
| | Connector | | VDE IEC Standard | |
| DC Power input | DC Supply voltage | | 24 VDC | |
| | DC Current | | A | |
| | | | | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 | EIA rack |
| | | mm / inch | 88 / 3 1/2 | 2HE |
| Weight | | kg | About 4 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **AUDIO INPUTS** | | | | |
| Analog | | | 8 ÷ 32 | Analog inputs depending by expansion card number |
| Digital / Analog | | | 16 ÷ 64 | Digital inputs depending by expansion card number |
| **OUTPUTS** | | | | |
| Relay | | | 8 ÷ 32 | Analog inputs depending by expansion card number |
| **INTERFACES** | | | | |
| User interface | | | Graphical LCD - 128 x 64 with Encoder | |
| Signalling LEDs / synoptical | | | Yes | |
| I2C | | | Yes | |
| RS232 | | | Yes | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse 4 A F - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## SCM6/1

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative Humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply voltage | | 115 - 125 - 230 - 250 VAC ±15% | |
| | AC Apparent power consumption | W | 50 | |
| | Connector | | VDE IEC Standard | |
| DC Power input | DC Supply voltage | | 24 VDC | |
| | DC Current | | <2 a | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 | EIA rack |
| | | mm / inch | 176 / 3 1/2 | 4HE |
| Weight | | kg | About 6,5 | |
| Cooling | | | Forced with internal fans | |
| Acoustic noise | | dBA | <58 | |
| **AUDIO INPUTS** | | | | |
| Digital | | | | |
| **OUTPUTS** | | | | |
| Relay | | | Specific RVR connectors | |
| **INTERFACES** | | | | |
| User interface | | | Graphical LCD - 240 x 128 with Encoder | |
| Signalling LEDs / synoptical | | | Yes | |
| TC/TS | | | Yes | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse 4 A - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# CHANGEOVER ACCESSORIES

AUD - SCM - RDS

MODELS

AUD2P1
AUD6/1
AUD2MP1
AES6/1
SCM-AUD
RDS6/1



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**To ensure the continuity of transmission of the transmitting equipment, RVR produces various models of changeover units for the control of redundant configurations in 1 + 1 and N + 1 up to 6 + 1.**

**By integrating coaxial relays, distributors and Audio, MPX and RDS routers, it is thus possible to manually or automatically switch the reserve transmission in case of failure of one of the main ones. Depending on the architecture of the transmitting site, dedicated models are available.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| AUD2P1 | The audio splitter system allows you to split the audio signal in input and redistribute it on multiple outputs. |
| AUD2MP1 | The audio splitter system allows you to split the audio signal in input and redistribute it on multiple outputs. |
| OPTION | |
| AUD2MP1/V1 | 2-Way passive audio distriution system for MPX/DIGITAL/L&R signals. |
| AUD2MP1/V2 | 2-Way passive audio distriution system for MPX+RDS/DIGITAL/L&R signals. |
| AUD2MP1/V3 | 2-Way passive audio distriution system for MPX+RDS+SCA1/DIGITAL/L&R signals. |
| AUD2MP1/V4 | 2-Way passive audio distriution system for MPX+RDS+SCA1-2/DIGITAL/L&R signals. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| SCM-AUD | Passive analog audio signal switch unit for SCMLCDN+1 changeover. |
| SCM-AES/EBU | Passive AES/EBU audio signal switch unit for SCMLCDN+1 changeover. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| AUD6/1 | Passive analog audio signal switch unit for SCM6/1 changeover. |
| AES6/1 | Passive AES/EBU audio signal switch unit for SCM6/1 changeover. |
| RDS6/1 | Passive MPX, RDS, Pilot signals switch unit for SCM6/1 changeover. |

**AUD2MP1**

Accessory - Audio Distributor System.

**SCM-AUD**

Accessory for SCMLCDN+1.

**SCM-AES/EBU**

Accessory for SCMLCDN+1.

**AUD6/1**

Accessory for SCM6/1.

**AES6/1**

Accessory for SCM6/1.

**RDS6/1**

Accessory for SCM6/1.



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## SCM-AUD

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 80 - 260 VAC | Full Range Monophase |
| | Active Power Consumption | | 5W | |
| | Connector | | VDE IEC Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 44 / 3 1/2 | 1HE |
| Weight | | kg | About 1,4 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **AUDIO INPUTS** | | | | |
| L&R (from 1 to 4) | Connector | | XLR female Balanced | |
| | Passthrough Gain | | ±7dB adjustable | |
| | Impedance | | 10K-600-2K Ω selectable | |
| | Maximum input level | dBu | 20 | |
| MPX & PILOT | Connector | | BNC Unbalanced | |
| | Passthrough Gain | | ±7dB adjustable | |
| | Impedance | | 50 - 10K Ω selectable | |
| | Maximum input level | dBu | 14 | |
| **OUTPUTS** | | | | |
| L&R (from 1 to 4) L&R Reserve | Connector | | XLR male Balanced | |
| | Maximum Level | dBu | 20 | |
| | Load | | > 2K Ω | |
| MPX & PILOT | Connector | | BNC Unbalanced | |
| | Maximum Level | dBu | 14 | |
| | Load | | > 50 Ω | |
| **INTERFACES** | | | | |
| Signalling LED | | | Yes | |
| COMMAND | IN | | DB25 Female (SCMLCDN+1 interface) | |
| | OUT | | DB25 Male (SCM-AES/EBU interface) | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse F 315 mA - 5X20 mm | |

## SCM-AES/EBU

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 80 - 260 VAC | Full Range Monophase |
| | Active Power Consumption | | 1W | |
| | Connector | | VDE IEC Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 44 / 3 1/2 | 1HE |
| Weight | | kg | About 1,4 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **AUDIO INPUTS** | | | | |
| L&R (from 1 to 4) | Connector | | XLR female Balanced | |
| | Data Formats | | AES/EBU | |
| | Impedance | | 110 Ω | |
| **OUTPUTS** | | | | |
| AES/EBU (from 1 to 4) & Reserve | Connector | | XLR male Balanced | |
| | Data Formats | | AES/EBU | |
| | Impedance | | 110 Ω | |
| **INTERFACES** | | | | |
| Signalling LED | | | Yes | |
| COMMAND | IN | | DB25 Female (SCMLCDN+1 or SCM-AUD interface) | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse F 315 mA - 5X20 mm | |

## AUD6/1

| Parameters | | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| Ambient working temperature | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **MECHANICAL DIMENSIONS** | | | |
| Phisical dimensions L x H x W | mm / inch | 483 / 19 | EIA rack |
| | mm / inch | 88 / 3 1/2 | 2HE |
| Weight | kg | About 0,5 | |
| Cooling | | Convection cooling | |
| Acoustic noise | dBA | 0 | |
| **AUDIO INPUTS** | | | |
| L&R (from 1 to 6) | | Connector | XLR female Balanced |
| MPX | | Connector | BNC Unbalanced |
| **OUTPUTS** | | | |
| L&R (from 1 to 6) & L&R Reserve | | Connector | XLR male Balanced |
| MPX | | Connector | BNC Unbalanced |
| **INTERFACES** | | | |
| Signalling LED | | Power | 1 Green |
| | | Position | 6 Yellow |
| COMMAND | | IN | DB25 Female (SCM6/1 interface) |
| | | OUT | DB25 Male (RDS6/1 interface) |

## AES6/1

| Parameters | | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| Ambient working temperature | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **MECHANICAL DIMENSIONS** | | | |
| Phisical dimensions L x H x W | mm / inch | 483 / 19 | EIA rack |
| | mm / inch | 88 / 3 1/2 | 1HE |
| Weight | kg | About 1,4 | |
| Cooling | | Convection cooling | |
| Acoustic noise | dBA | 0 | |
| **AUDIO INPUTS** | | | |
| L&R (from 1 to 6) | | Connector | XLR female Balanced |
| | | Impedance | 110 Ω |
| **OUTPUTS** | | | |
| AES/EBU (from 1 to 6) & Reserve | | Connector | XLR male Balanced |
| | | Load | 110 Ω |
| **INTERFACES** | | | |
| Signalling LED | | Power | 1 Green |
| | | Position | 6 Yellow |
| COMMAND | | IN | DB25 Female (AUD6/1 interface) |
| | | OUT | DB25 Male (RDS6/1 interface) |

## RDS6/1

| Parameters | | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| Ambient working temperature | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **MECHANICAL DIMENSIONS** | | | |
| Phisical dimensions L x H x W | mm / inch | **483** | EIA rack |
| | mm / inch | 88 / 3 1/2 | 1HE |
| Weight | kg | About 0,5 | |
| Cooling | | Convection cooling | |
| Acoustic noise | dBA | 0 | |
| **AUDIO INPUTS** | | | |
| PILOT (from 1 to 6) | | Connector | BNC Unbalanced |
| RDS (from 1 to 6) | | Connector | BNC Unbalanced |
| SCA (from 1 to 6) | | Connector | BNC Unbalanced |
| | | | |
| **OUTPUTS** | | | |
| PILOT (from 1 to 6) & Reserve | | Connector | BNC Unbalanced |
| RDS (from 1 to 6) & Reserve | | Connector | BNC Unbalanced |
| SCA (from 1 to 6) & Reserve | | Connector | BNC Unbalanced |
| | | | |
| **INTERFACES** | | | |
| Signalling LED | | Power | 1 Green |
| | | Position | 6 Yellow |
| COMMAND | | IN | DB25 Female (AUD6/1 interface) or (AES6/1 interface) |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# RDS & AUDIO EQUIPMENTS

## AUD - RDS

MODELS

## AUD2P1 AUD2MP1
## TRDS4002LUXOR-D

R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**Designed to be the army knife in a transmission site when the audio has to be delivered, splitted, converted in different ways, the R.V.R. distribution's systems are studied to feed multiple destinations handling stereo, mono, MPX, AES/EBU, S/P-DIF and Toslink sources.**

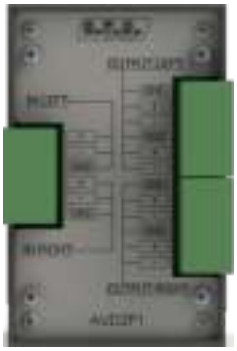
| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| AUD2P1 | The audio splitter system allows you to split the audio signal in input and redistribute it on multiple outputs. |
| AUD2MP1 | The audio splitter system allows you to split the audio signal in input and redistribute it on multiple outputs. |
| OPTION | |
| AUD2MP1/V1 | 2-Way passive audio distriution system for MPX/DIGITAL/L&R signals. |
| AUD2MP1/V2 | 2-Way passive audio distriution system for MPX+RDS/DIGITAL/L&R signals. |
| AUD2MP1/V3 | 2-Way passive audio distriution system for MPX+RDS+SCA1/DIGITAL/L&R signals. |
| AUD2MP1/V4 | 2-Way passive audio distriution system for MPX+RDS+SCA1-2/DIGITAL/L&R signals. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TRDS4002-LUXOR-D | Advanced Radio Data System dynamical encoder with SNMP V 2 control. |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it



## AUD2P1

Accessory - Audio Distributor System.

## AUD2MP1

Accessory - Audio Distributor System.

## TRDS-4002-LUXOR-D

RDS.

## AUD2P1

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Operation temperature | | | From -10 °C to + 50 °C | |
| Operation humidity | | % | 95 | Without condensing |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm | 70 | |
| Overall dimensions | L x H x W | mm | 72 | |
| Weight | | kg | About 0,5 | |
| **AUDIO INPUTS** | | | | |
| Left & Right | Connector | | Terminal Block | |
| | Impedance | | 600 Ω | |
| **OUTPUTS** | | | | |
| Left & Right | Connector | | 2x Terminal Block | |
| | Channels loss | | 8 db @ 10 kΩ Load | |
| | Bandwidth | | From DC to 20 kHz | |

## AUD2MP1

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Operating temperature | | °C | From -10 to +50 | |
| Operating humidity | | % | 95% non condensing | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 44 / 3 1/2 | 1HE |
| Weight | | kg | About 2 | |
| **AUDIO INPUTS** | | | | |
| Left & Right | Connector | | XLR (female) | |
| | Impedance | Ohm | 600 (10k on request) | Balanced |
| | Channels loss | dBm | 6 | |
| | Bandwidth | Hz | From DC to 20k | |
| MPX | Connector | | BNC | |
| RDS | Impedance | Ohm | 10k | Unbalanced |
| SCA1 | Channels loss | dBm | 6 | |
| SCA2 | Bandwidth | Hz | From DC to 100k | |
| AES/EBU | Connector | | XLR (female) | |
| | Impedance | Ohm | 110 | Balanced |
| **OUTPUTS** | | | | |
| Left & Right | Connector | | 2 x XLR (male) | |
| | Impedance | Ohm | 600 (10k on request) | Balanced |
| | Channels loss | dBm | 6 | |
| | Bandwidth | Hz | From DC to 20k | |
| MPX | Connector | | 2 x BNC | |
| RDS | Impedance | Ohm | 10k | Unbalanced |
| SCA1 | Channels loss | dBm | 6 | |
| SCA2 | Bandwidth | Hz | From DC to 100k | |
| AES/EBU | Connector | | 2 x XLR (male) | |
| | Impedance | Ohm | 110 | Balanced |
| | Insert loss | dB | 6 | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## TRDS4002-LUXOR-D

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Operating temperature | | | From -10 °C to + 50 °C | |
| Operating humidity | | % | 95 | Without condensing |
| A/D & D/A conversion | | | 24 bit | |
| DSP Elaboration | | | 32 bit, fixed point | |
| RDS function | EN50067 | | PTY, PTYN, TA, TP, MS, DI, PI, PS, AF, PIN, EON, RT, TDC, IMC, EWS, IH, CT | |
| | Command formats | | UECP – SPB490 Ver.6.1 / 2003 | |
| | Frequency | | 57 kHz ± 1,5 Hz | (Internal/external reference) |
| | 57 kHz carrier attenuation | dB | Ø 75 | |
| | Phase 57 kHz | | Adjustable up to 360° in 0,33° increments | |
| | Out of band emission | dB | Ø 100 | |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 115 /230 VAC ± 10% | |
| | Connector | W | VDE IEC Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| Overall dimensions | L x H x W | mm / inch | 483 | EIA rack |
| | | mm / inch | 44 / 3 1/2 | 1HE |
| Weight | | kg | About 3,5 | |
| **AUDIO INPUTS** | | | | |
| MPX | Connector | | BNC | Unbalanced (female) |
| | Impedance | k Ω | 10 | |
| | Input level | | Gain 0dB / Max. +20 dBu | |
| PILOT | Connector | | BNC | Unbalanced (female) |
| | Impedance | k Ω | 10 | |
| | Input level | | Gain 0dB / Max. +20 dBu | (Sinusoid. or TTL) |
| **OUTPUTS** | | | | |
| 1&2 | Connector | | BNC | Unbalanced (female) |
| | Impedance | Ω | 50 | |
| | Output level | dBu | +20 | Adjustable via software |
| **CONNECTORS** | | | | |
| RS232 Serial port | Connector | | 3x DB9 (female) | |
| | Connection rate | | From 1200 to 115200 baud 8, N, 1 | |
| Remote Input | Connector | | DB25 (male): 8 input + 8 output (optional) | |
| Ethernet | Connector | | RJ45 (female) WEB & SNMP v.1.0 (optional) SNMP V2.C (TRDSP-4002-LUXOR-D) | |
| WEB Server | | | Built in for TRDS4002-LUXOR-D | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# GPS RECEIVER

## GPSRXNV

MODELS

GPSRXNV-00
GPSRXNV-01
GPSRXNV-02



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

**The GPSRXNV is a GPS receiver (Global Positioning System), suitable for the synchronization of isofrequency broadcasting systems (SFN - alias Single Frequency network).**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| GPSRXNV-00 | External GPS Receiver. |
| GPSRXNV-01 | External GPS Receiver with antenna. |
| GPSRXNV-02 | External GPS Receiver (PTX CONFIG.) |

| OPTION | |
|---|---|
| /DSTB-GPSRX | 10MHZ 1PPS distributor. |
| /DST10 | Adds (3x) auxiliary ouputs at 10MHz and (2x) auxiliary outputs at 1pps. |

# GPSRXNV

## GPSRXNV-00

External GPS Receiver.

## GPSRXNV-01

External GPS Receiver with antenna.

## GPSRXNV-02

External GPS Receiver (PTX CONFIG.)



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
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Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## GPSRXNV-00

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Operating temperature | | | 0°C +50°C | |
| Storage temperature | | | - 40°C +85°C 0°C +50°C | |
| Operating temperature | | | 0°C 85°C, | Without condensation |
| **POWER REQUIREMENTS** | | | | |
| C.A. power supply | | | c.100-120-230-250 VAC , 50-60 Hz | |
| C.C. power supply | | VDC | +12 | Monophase |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | EIA rack |
| | Front panel height | mm / inch | 44 / 3 / 1 / 2 | 1HE |
| Weight | | kg | About 4 | |
| **AUDIO INPUTS** | | | | |
| Connector | | | BNC | |
| Accuracy to UTC, with GPS locked | | | ± 50 ns (1σ) | |
| GPS system | | | Integrated | |
| **OUTPUTS** | | | | |
| Connector | | | N-type 5V output for antenna power supply | |
| Typical level | | | TTL | |
| 10MHz output frequency accuracy | | | <± 2 x 10-12 | |
| Connector | | | BNC | |
| Signal form | | | | Sinusoidal |
| Typical level | | | 5 dBm / 50Ω | |
| Harmonic distortion | | | -25 | |
| **INTERFACES** | | | | |
| RS232 serial interface | | | DB9 | Female connector to connect the receiver to an ext. devices for prog. |
| ALARMS interface | | | DB9 | Male connector signaling of alarm status |

## GPSRXNV-01

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Operating temperature | | | 0°C +50°C | |
| Storage temperature | | | - 40°C +85°C 0°C +50°C | |
| Operating temperature | | | 0°C 85°C, | Without condensation |
| **POWER REQUIREMENTS** | | | | |
| C.A. power supply | | | c.100-120-230-250 VAC , 50-60 Hz | |
| C.C. power supply | | VDC | +12 | Monophase |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | EIA rack |
| | Front panel height | mm / inch | 44 / 3 / 1 / 2 | 1HE |
| Weight | | kg | About 4 | |
| **AUDIO INPUTS** | | | | |
| Connector | | | BNC | |
| Accuracy to UTC, with GPS locked | | | ± 50 ns (1σ) | |
| GPS system | | | Integrated | |
| **OUTPUTS** | | | | |
| Connector | | | N-type 5V output for antenna power supply | |
| Typical level | | | TTL | |
| 10MHz output frequency accuracy | | | <± 2 x 10-12 | |
| Connector | | | BNC | |
| Signal form | | | | Sinusoidal |
| Typical level | | | 5 dBm / 50Ω | |
| Harmonic distortion | | | -25 | |
| **INTERFACES** | | | | |
| RS232 serial interface | | | DB9 | Female connector to connect the receiver to an ext. devices for prog. |
| ALARMS interface | | | DB9 | Male connector signaling of alarm status |

## GPSRXNV-02

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Operating temperature | | | 0°C +50°C | |
| Storage temperature | | | - 40°C +85°C 0°C +50°C | |
| Operating temperature | | | 0°C 85°C, | Without condensation |
| **POWER REQUIREMENTS** | | | | |
| C.A. power supply | | | c.100-120-230-250 VAC , 50-60 Hz | |
| C.C. power supply | | VDC | +12 | Monophase |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 / 19 | EIA rack |
| | Front panel height | mm / inch | 44 / 3 / 1 / 2 | 1HE |
| Weight | | kg | About 4 | |
| **AUDIO INPUTS** | | | | |
| Connector | | | BNC | |
| Accuracy to UTC, with GPS locked | | | ± 50 ns (1σ) | |
| GPS system | | | Integrated | |
| **OUTPUTS** | | | | |
| Connector | | | N-type 5V output for antenna power supply | |
| Typical level | | | TTL | |
| 10MHz output frequency accuracy | | | <± 2 x 10-12 | |
| Connector | | | BNC | |
| Signal form | | | | Sinusoidal |
| Typical level | | | 5 dBm / 50Ω | |
| Harmonic distortion | | | -25 | |
| **INTERFACES** | | | | |
| RS232 serial interface | | | DB9 | Female connector to connect the receiver to an ext. devices for prog. |
| ALARMS interface | | | DB9 | Male connector signaling of alarm status |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

# DUMMY LOADS

## EDL-FM

MODELS

EDL1000-FM
EDL3500-FM
EDL5000-FM
EDL6000-FM
EDL15000-FM

# EDL-FM

**Needed in mostly any broadcasting centre, our dummy loads and relays assure safe operations during transmission, maintenance and test operation.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| EDL1000-FM | **1kW** Dummy Load. Forced Air Cooled. |
| EDL3500-FM | **3.5kW** Dummy Load. Forced Air Cooled. |
| EDL5000-FM | **5kW** Dummy Load. Forced Air Cooled. |
| EDL6000-FM | **6kW** Dummy Load. Forced Air Cooled. |
| EDL15000-FM | **15.000W** Dummy Load. Forced Air Cooled. |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
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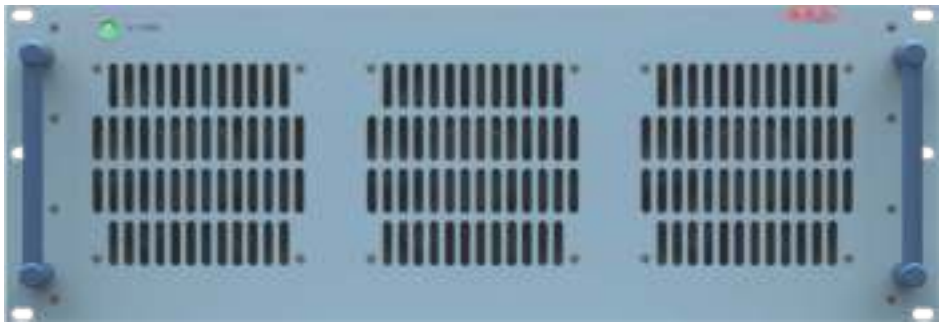
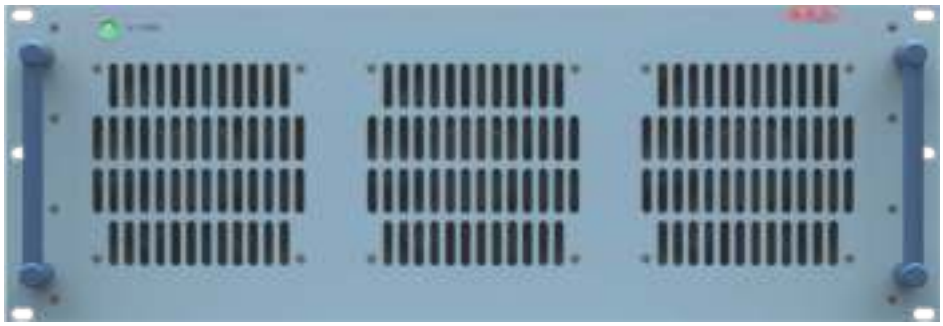
## EDL1000-FM

**1kW** Dummy Load. Forced Air Cooled.



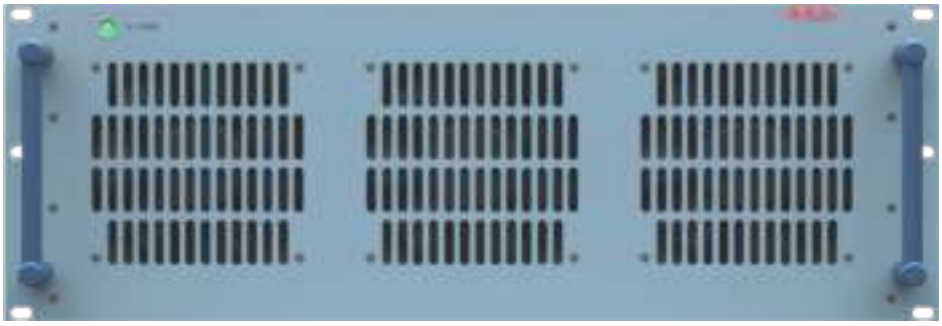
## EDL3500-FM

**3.5kW** Dummy Load. Forced Air Cooled.



## EDL5000-FM

**5kW** Dummy Load. Forced Air Cooled.



## EDL6000-FM

**6kW** Dummy Load. Forced Air Cooled.

### EDL1000-FM

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Max power rating | | W | 1000 | |
| Frequency range | | MHz | 87.5 - 108.0 | |
| Return loss | | dB | >20 | |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 230 VAC ±15% single-phase | |
| | Connector | | VDE | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 132 / 3 1/2 3HE | |
| Weight | | kg | About 19 | |
| Cooling | | | Automatically forced air-cooled | |
| **AUDIO INPUTS** | | | | |
| RF Input | Impedance | Ohm | 50 | |
| | Connector | | 7/16" | |
| **FUSES** | | | | |
| On blowers | | | 3 External fuses F 1A | |



### EDL3500-FM

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Max power rating | | W | 3500 | |
| Frequency range | | MHz | DC ÷ 108 | |
| Return loss | | dB | >27 | |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | | 230 VAC ±15% single-phase | |
| | Connector | | VDE | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 177 / 7 4HE | |
| Weight | | kg | About 18 | |
| Cooling | | | Automatically forced air-cooled | |
| **AUDIO INPUTS** | | | | |
| RF Input | Impedance | Ohm | 50 | |
| | Connector | | 7/8" | |
| **FUSES** | | | | |
| On blowers | | | / | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

## EDL5000-FM

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **Max power rating** | | | 5000 | |
| **Frequency range** | | MHz | DC ÷ 108 Mhz | |
| **Return loss** | | dB | >27 | |
| **POWER REQUIREMENTS** | | | | |
| **AC Power input** | AC Supply Voltage | | 230 VAC ±15% single-phase | |
| | Connector | | VDE | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical dimensions** | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 177 / 7 4HE | |
| **Weight** | | kg | About 20 | |
| **Cooling** | | | Automatically forced air-cooled | |
| **AUDIO INPUTS** | | | | |
| **RF Input** | Impedance | Ohm | 50 | |
| | Connector | | 7/8" | |
| **FUSES** | | | | |
| **On blowers** | | | / | |

## EDL6000-FM

| Parameters | | U.M. | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| **Max power rating** | | | 6000 | |
| **Frequency range** | | MHz | DC ÷ 108 Mhz | |
| **Return loss** | | dB | >27 | |
| **POWER REQUIREMENTS** | | | | |
| **AC Power input** | AC Supply Voltage | | 230 VAC ±15% single-phase | |
| | Connector | | VDE | |
| **MECHANICAL DIMENSIONS** | | | | |
| **Phisical dimensions** | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 177 / 7 4HE | |
| **Weight** | | kg | About 20 | |
| **Cooling** | | | Automatically forced air-cooled | |
| **AUDIO INPUTS** | | | | |
| **RF Input** | Impedance | Ohm | 50 | |
| | Connector | | 7/8" | |
| **FUSES** | | | | |
| **On blowers** | | | / | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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Fax +39 0516011104
sales@rvr.it - www.rvr.it

# TELEMETRY SYSTEM

## TLK - /TLW-E

**The possibility of remotely monitoring and controlling the station allows to optimize operation by preventing malfunctions and reducing intervention times in the event of a breakdown.
RVR has a full set of remote control systems.**

MODELS

TLK300
TLK301
TLK302T
/TLW-E



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
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**There are IP telemetry modules that can be integrated into the compact transmitters of the TEXLCD and TEXTFT series, SNMP telemetry for individual transmitting devices or systems, SNMP2 telemetry systems for complex and redundant configurations, all compatible with any device such as smartphone, Desktop PC, Laptop.**

**Versions available for serial port, GSM, WEB, easy to configure and fully compatible with any operating system.**

- **TLK300: SNMP external unit for single devices and systems.**
- **TLK301: SNMPv2, SNMPT Auth mail and slave SCMLCD4+1 systems.**
- **TLK302T: SNMP2 external unit for single devices and systems.**
- **/TLW-E: module that can be integrated into BLUES-NV, TEX-LCD and TEX-TFT devices.**

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TLK300 | The telemetry systems allow for an immediate intervention in case of fault, thanks to the radio station remote control. |
| VERSION | |
| TLK300/V9 | Telemetry unit SERIAL only for TX 1+1 Compact Transmitter Series with SCML1+1SL. |
| TLK300/V10 | Telemetry unit GSM only for TX 1+1 Compact Transmitter Series with SCML1+1SL. |
| TLK300/V11 | Telemetry unit WEB only for TX 1+1 Compact Transmitter Series with SCML1+1SL. |
| TLK300/V12 | Telemetry unit WEB + GSM only for TX 1+1 Compact Transmitter Series with SCML1+1SL. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TLK301 | The telemetry systems allow for an immediate intervention in case of fault, thanks to the radio station remote control. |
| VERSION | |
| TLK301/V1 | Telemetry unit serial for TX modular line. |
| TLK301/V2 | Telemetry unit GSM for TX modular line. |
| TLK301/V3 | Telemetry unit LAN for TX modular line. |
| TLK301/V4 | Telemetry unit LAN+GSM for TX modular line. |
| TLK301/V5 | Telemetry unit serial for TX PLUG-IN-CA. |
| TLK301/V6 | Telemetry unit GSM for TX PLUG-IN-CA. |
| TLK301/V7 | Telemetry unit LAN for TX PLUG-IN-CA. |
| TLK301/V8 | Telemetry unit LAN+GSM for PLUG-IN-CA. |

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| TLK302T | TLK302T is an evolution of the TLK300 Telemetry Serie that includes additional functions for telemetry. |
| TLK302T-02 | Double Telemetry unit WEB. |
| TLK302T-M | Telemetry unit WEB + FM Radio Receiver and Modulation Analyzer. |

Module that can be integrated into BLUES-NV ,TEX-LCD and TEX-TFT devices.

| ORDERING INFORMATION | |
|---|---|
| Model | Description |
| /TLW-BLU-E | BLUES30NV BLUES50NV |
| /TLW-TEX-E | TEX30LCD/S TEX50LCD/S TEX100LCD/S TEX150LCD/S TEX300LCD TEX502LCD TEX702LCD TEX3500LCD |
| /TLW-TFT-E | TEX32TFT TEX52TFT TEX302LCD/S TEX502TFT TEX702TFT TEX1002TFT TEX1003TFT TEX1703TFT TEX2003TFT TEX2503TFT TEX5004TFT |

## TLK300

Telemetry System.


## TLK301

Telemetry System.

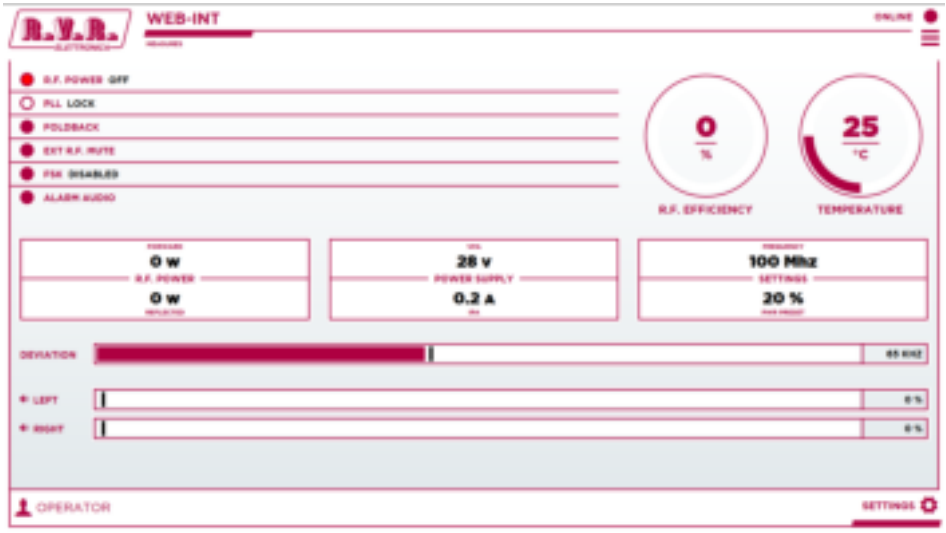


R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it


## TLK302T

Telemetry System.




## /TLW-E

Telemetry System.

## TLK300

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | VAC | 80 - 260 | Full Range Monophase |
| | AC Apparent Power Consumption | W | 25 | |
| | Connector | | VDE IEC Standard | |
| DC Power Input | DC Supply Voltage | VDC | 12 | |
| | DC Current | | < 3 a | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 / 19 | EIA rack |
| | | mm / inch | 88 / 3 1/2 | 1HE |
| Weight | | kg | About 4,3 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **INTERFACES** | | | | |
| Signalling LEDS | | | Yes | |
| Display | 40X2 Alphanumerical | | No | |
| Push buttons | 4 (UP, DOWN, ENTER, ESC) | | No | |
| USB | TELECON Protocol | | Yes | |
| RS232 | TELECON Protocol | | Yes | |
| RS485 | PLUG-IN Protocol | | Yes | (Only on TX PLUG-IN CA versions) |
| I2C | | | Yes | |
| RJ45 | LAN | | Yes | (Only on WEB versions) |
| | 10/100 base-T Ethernet LAN | | Yes | |
| | HTTP and AJAX | | Status and configuration can be accessible from any internet browser on a PC or smartphone | |
| | SMTP | | Alarm notification events sends via emails (up to 4 independent address can be defined) | |
| SIM slot & ANTENNA | | | Yes | (Only on GSM versions) |
| **FUSES** | | | | |
| On mains | | | 1 External fuse F 1 A F - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |

## TLK301

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | °C | -10 to + 5 | Whithout condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | VAC | 80 ÷ 260 * | Full Range ** Internal switch * |
| | AC Apparent Power Consumption | W | 25 | |
| | Connector | | VDE IEC Standard | |
| DC Power Input | DC Supply Voltage | VDC | 12 | |
| | DC Current | | < 3 | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse F 1 A F ÷ 5X20 mm | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | Front panel width | mm / inch | 483 | EIA rack |
| | Front panel height | mm / inch | 44 | 1HE |
| | Overall depth | mm / inch | 263 | |
| | Chassis depth | mm / inch | 239 | |
| Weight | | kg | About 4,3 | |
| **INTERFACES** | | | | |
| Signalling LEDS | | | Yes | |
| Display | 40X2 Alphanumerical | | No | |
| Push buttons | 4 (UP, DOWN, ENTER, ESC) | | No | |
| USB | TELECON Protocol | | Yes | |
| RS232 | TELECON Protocol | | Yes | |
| RS485 | PLUG-IN Protocol | | Yes | (Only on TX PLUG-IN CA versions) |
| I2C | | | Yes | |
| RJ45 | LAN | | Yes | (Only on WEB versions) |
| SIM slot & ANTENNA | | | Yes | (Only on GSM versions) |
| **VARIOUS** | | | | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |





R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

Phone +39 0516010506
Fax +39 0516011104
sales@rvr.it - www.rvr.it

### TLK302T

| Parameters | | | Value | Notes |
|---|---|---|---|---|
| **GENERALS** | | | | |
| Ambient working temperature | | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **POWER REQUIREMENTS** | | | | |
| AC Power input | AC Supply Voltage | VAC | 100 - 240 | Full Range Monophase |
| | AC Apparent Power Consumption | W | 15 | |
| | Connector | | VDE IEC Standard | |
| **MECHANICAL DIMENSIONS** | | | | |
| Phisical dimensions | L x H x W | mm / inch | 483 | EIA rack |
| | | mm / inch | 88 / 3 1/2 | 1HE |
| Weight | | kg | About 1 | |
| Cooling | | | Convection cooling | |
| Acoustic noise | | dBA | 0 | |
| **INTERFACES** | | | | |
| Signalling LEDS | | | Yes | |
| RS232 | | | Yes | (only exciter PTX) |
| RS485 | PLUG-IN protocol | | Yes | (only TX PLUG IN-CA version) |
| I²C | For sampling the RVR station single and dual exciter | | Yes | |
| RJ45 | 10/100 base-T Ethernet LAN | | Yes | |
| | HTTP | | Status and configuration can be accessible from any internet browser on a PC or smartphone. | |
| | SNMPV 2.0 | | Status and configuration can be accessible from MIB browser and TRAP alarm receiver. | |
| | SMTP | | Alarm notification events sends via emails (up to 2 independent address can be defined). | |
| | SMTP | | Built-in dock synchronization over networks. | |
| **FUSES** | | | | |
| On mains | | | 1 External fuse F 3,15 A T - 5X20 mm | |
| On services | | | X | |
| On PA Supply | | | X | |
| On driver supply | | | X | |

### /TLW-E

| Parameters | | Value | Notes |
|---|---|---|---|
| **GENERALS** | | | |
| Ambient working temperature | | -10 °C to + 50 °C / 95% | Relative humidity non condensing |
| **FEATURES** | | | |
| I2C Slave for connection to external telemetry | | X | |
| Connection with WEB Browser (IE, Firefox, Opera, ..) | | X | |
| WEB protection with 2 Password Levels | | X | |
| SNMP connection (GET,SET) | | X | |
| TRAP notification with Station name | | X | |
| TRAP notification with Counter | | X | |



R.V.R. Elettronica S.r.l.
Via del Fonditore, 2/2c
40138 Bologna Italy

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R.V.R. Elettronica S.r.l.
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40138 Bologna Italy

Phone +39 0516010506
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Member of CISQ Federation

CERTIFIED MANAGEMENT SYSTEM
ISO 9001

**R.V.R. Elettronica S.r.l.**
Via del Fonditore 2/2 c
40138 Bologna - Italy
Phone +39 051 6010506
sales@rvr.it

**www.rvr.it**

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