

**GENERAL CATALOGUE** 

# **GENERAL CATALOGUE**

2 —	FM TRANSMITTERS EXCITERS / COMPACT TRANSMITTERS	74 —	RADIO LINKS RADIO LINKS SYSTEM
3 —	BLUES-NV SERIES	75 —	PTRL - RXRL
7 —	TEX-LCD SERIES		STATIONS ACCESSORIES
12	TEX-TFT SERIES	80 —	_
17 —	PTX-LCD SERIES	81	CHANGEOVER UNITS SYSTEM
22	PTX-LCDDSP SERIES	OI	SCM
27	- PTX-DDS SERIES		CHANGEOVER ACCESSORIES
		87	AUD-SCM-RDS
32	DIGITAL RADIO TRANSMITTERS  DAB+/DMB DIGITAL RADIO  DRT SERIES	92 —	RDS & AUDIO EQUIPMENTS AUD-RDS
40	FM STATIONS  AIR COOLED STATIONS AND	97 —	GPS RECEIVER  GPSRXNV
41	TRANSMITTING SYSTEMS  - MODULAR SERIES		DUMMY LOADS
47	PLUG-IN SERIES	102 —	EDL-FM
53 —	PLUG-IN NEXT GEN SERIES		TELEMETRY SYSTEM
60 —	REDUNDANT TRANSMITTERS SYSTEM	107 —	TLK- /TLW-E
64	FM AMPLIFIERS BROADBAND AIR COOLED AMPLIFIERS		
65 —	PJ-LIGHT - PJ-LCD SERIES		
<b>5</b> 0			

**PJ-PLUG-IN SERIES** 

# **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







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	<b>30W</b> Ultra Compact Stereo Transmitter.
BLUES50NV	<b>50W</b> 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.





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

## **BLUES50NV**

**50W** Compact Stereo Transmitter.



# **BLUES-NV** SERIES

			BLUES30NV	BLUES50NV	
Parameters		U.M.	Value		Notes
GENERALS Frequency range			87.5 ÷ 108		
		MHz W		50	Continuously adjustable from 10 to 100%
Rated output power		VV	30		Continuousty aujustable from 10 to 100%
Modulation type		1	F3E Direct carrier fre		
)perational mode			Mono, Stereo, Mu	ltiplex	
Norking temperature		°C	-5 to + 50		
Norking humidity		%	95		Without condensing
Norking altitude		m	Up to 2000		With adequate air evacuation system in site
requency programmabi	ility	kHz	10		Steps
requency stability	Working Temp. from -5°C to 50°C	ppm	±1		
Modulation capability	Refered @ OdBu for 75kHz	kHz	150 Stereo, 180 Mo	no/MPX	Meets or exceeds all FCC and CCIR rules
re-emphasis mode		μS	0, 50 (CCIR), 75	(FCC)	Selectable
OWER REQUIREMENTS					
	AC Supply Voltage	VAC	80 ÷ 260		Internal switch
	AC Apparent Power Consumption	VA	120	200	
C D	Active Power Consumption	W	70	100	
C Power input	Power Factor		0,5		
	Overall Efficiency	%	Typical 50		
	Connector	Í	VDE IEC Stand	ard	
IECHANICAL DIMENSIO					
	Front panel width	mm / inch	483 / 19		EIA rack
	Front panel height	mm / inch	44 / 3 1/2 1H	E	
hisical dimensions	Overall depth	mm	394		
	Chassis depth	mm	372		
Veight	ondoolo doptii	kg	About 5,5		
-		ny	Forced, with internal	ol fon	
Cooling		IDA	·	at fall	
Acoustic noise		dBA	< 58		
AUDIO INPUTS	Connector		XLR F		I .
	Connector				
eft / Mono	Туре	01	Balanced		
	Impedance	Ohm	10 k or 600		
	Input Level /Adjust	dBu	-13 to +13		Continuosly adjustable
	Connector		XLR F		
light	Туре		Balanced		
Right	Impedance	Ohm	10 k or 600		
	Input Level	dBu	-13 to +13		Continuosly adjustable
	Connector		BNC		
	Туре		Unbalanced		
1PX	Impedance	Ohm	10 k or 50		
	Input Level / Adjust	dBu	-13 to +13		For 7,5 KHz FM, adjustable
		ubu			1017,0 MIZ 111, dujustabie
	Connector		2 x BNC		
CA/RDS	Туре	01	Unbalanced		
	Impedance	Ohm	10 k		
	Subcarier Level @ 0 dBu	dB	-17 to -40		For 7,5 KHz FM, adjustable
	Connector		XLR F		
ES/EBU	Туре		Balanced		
optional)	Impedance	Ohm	110		
	Input Level / Adjust	dBfs	0 to -10		For 7,5 KHz FM, adjustable
DUTPUTS	•				
	Connector		N type		
r vutput	Impedance	Ohm	50		
	Connector		BNC		
F Monitor		Ohm	50		
		apill			
ilot output		Ohm			
ποι συτματ	·				
HOLO	output Level	Vpp	1		Sinusoidal
			1 External files F 3 15 T Fv20 mm 1 F.	dornal funa E & 2 T Ev20	
				kterriat ruse r o,3 1 - bxzu mm	
		1			
In driver supply			Х		
RF Output  RF Monitor  Pilot output  FUSES On mains On services On PA Supply On driver supply	Impedance	Ohm Ohm dBm Ohm Vpp	50 BNC	xternal fuse F 6,3 T - 5x20 mm	Sinusoidal





# **TEX-LCD SERIES**

**COMPACT HEAVY DUTY** 

from 30W to 3500W

**MODELS** 

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

TEX300LCD TEX3500LCD



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	<b>50W</b> 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	<b>3500W</b> 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.





# **TEX-LCD** SERIES



#### 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.



# **TEX-LCD** SERIES

			TEX30LCD/S	TEX100LCD/S	TEX150LCD/S	
Parameters		U.M.		Value		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 frequenc	у	
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 programmab	ility	kHz		10		Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm		±1		
Modulation capability	Refered @ OdBu 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 Supply Voltage	VAC	80 ± 260%	115 / 23		
	AC Apparent Power Consumption	VA	130	330	440	
AC Power input	Active Power Consumption	W	70	212	260	
	Power Factor			0,6		
	Overall Efficiency	%	Typical 50	Typical 47	Typical 55	
	Connector			VDE IEC Standard		
MECHANICAL DIMENSIO		1		100 1 40		F11 .
	Front panel width	mm / inch		483 / 19		EIA rack
Phisical dimensions	Front panel height	mm / inch		88 / 3 1/2 2HE		
	Overall depth	mm		394		
	Chassis depth	mm		372		
Weight		kg	About 6,5	Abou	t 8,5	
Cooling				Forced, with internal fan		
Acoustic noise		dBA		< 58		
AUDIO INPUTS	0			W.S.F		
	Connector			XLR F		
Left / Mono	Туре	1	Balanced			
•	Impedance	Ohm	10 or 600 k			
	Input Level /Adjust	dBu	-13 to +13			Continuosly adjustable
	Connector			XLR F		
Right	Туре			Balanced		
	Impedance	Ohm		10 or 600 k		
	Input Level	dBu		-13 to +13		Continuosly adjustable
	Connector			BNC		
MPX	Туре			Unbalanced		
	Impedance	Ohm		10 k or 50		
	Input Level / Adjust	dBu		-13 to +13		For 7,5 KHz FM, adjustable
	Connector			2 x BNC		
SCA/RDS	Туре			Unbalanced		
ממא/אטט	Impedance	Ohm	10 k			
	Subcarier Level @ 0 dBu	dB	-17 to -40			For 7,5 KHz FM, adjustable
	Connector			XLR F		
AES/EBU	Туре			Balanced		
AES/EBU (optional)	Impedance	Ohm		110		
	Input Level / Adjust	dBfs		0 to -10		For 7,5 KHz FM, adjustable
TOS/Link	Connector		TOSLINK			
TOS/Link (optional)	Туре			Optical		
OUTPUTS		,		.,		
DE Outnut	Connector			N type		
RF Output	Impedance	Ohm		50		
	Connector			BNC		
RF Monitor	Impedance	Ohm		50		
	Output Level	dBm	Approx30	Approx	60	
	Connector			BNC		
Pilot output	Load Impedance	Ohm		>5 k		
F '	Output Level	Vpp		1		Sinusoidal
FUSES		r.e				
On mains			1 External fuse F 3	,15 T - 5x20 mm   1 Externa	al fuse F 6,3 T - 5x20 mm	
On services				X		
OII 3CI VICC3						
On PA Supply				χ		





# **TEX-LCD** SERIES

			TEX300LCD	TEX702LCD	TEX3500LCD	
Parameters		U.M.		Value		Notes
GENERALS		MII-		07 E . 100		
Frequency range		MHz	200	87,5 ÷ 108	2500	Continuously adjustable from 10 to 100%
Rated output power		W	300	700	3500	continuousty aujustable from 10 to 100%
Modulation type		1	<u> </u>	3E Direct carrier frequency Mono, Stereo, MPX	у	
Operational mode		°C				
Working temperature				-5 to + 50		With and and desire
Working humidity		%		95		Without condensing
Working altitude		m	Up to		Up to 2000	With adequate air evacuation system in site
Frequency programma		kHz		10		Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm		±1		
Modulation capability	Refered @ OdBu for 75kHz	kHz		150 Stereo, 180 Mono/MP	X	Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode	-	μS		0, 50 (CCIR), 75 (FCC)		Selectable
POWER REQUIREMEN		_ wo _	00.0	0.40	000 400/ 450/ 1/00 400/ 450/	
	AC Supply Voltage	VAC	80 ÷2		230 +10% -15%   400 +10% -15%	Monophase   Threephases Y
	AC Apparent Power Consumption	VA	560	912	4996	
AC Power input	Active Power Consumption	W	520	910	4987	
•	Power Factor	0/	0,98		998	
	Overall Efficiency	%	Typical 55	Туріс		
APOULANIA	Connector		VDE IEC	Standard	Terminal Block	
MECHANICAL DIMENS		mm 1: 1		/00 / 40		EIA rack
	Front panel width	mm / inch	, a	483 / 19	100 / 5 1// 005	EIA TÜÜK
Phisical dimensions	Front panel height	mm / inch	88 / 3 1/		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		1		Forced, with internal fan		
Acoustic noise		dBA		< 75		
AUDIO INPUTS	0			VID 5		
	Connector	1 1	XLR F			
Left / Mono	Туре		Balanced			
	Impedance	Ohm		10 k or 600		
	Input Level /Adjust	dBu		-13 to +13	Continuosly adjustable	
	Connector			XLR F		
Right	Туре	1 !		Balanced		
	Impedance	Ohm		10 k or 600		
	Input Level	dBu		-13 to +13		Continuosly adjustable
	Connector			BNC		
MPX	Туре			Unbalanced		
rn A	Impedance	Ohm		10 k or 50		
	Input Level / Adjust	dBu		-13 to +13		For 7,5 KHz FM, adjustable
	Connector			2 x BNC		
cca/ppc	Туре			Unbalanced		
SCA/RDS	Impedance	Ohm		10 k		
	Subcarier Level @ 0 dBu	dB		-17 to -40		For 7,5 KHz FM, adjustable
	Connector			XLR F		
AES/EBU	Туре			Balanced		
(optional)	Impedance	Ohm		110		
	Input Level / Adjust	dBfs		0 to -10		For 7,5 KHz FM, adjustable
TOS/Link	Connector	1		TOSLINK		·
(optional)	Туре			Optical		
OUTPUTS	75			option		
	Connector		N t	уре	7/8" EIA	
RF Output	Impedance	Ohm		50		
	Connector			BNC		
RF Monitor	Impedance	Ohm		50		
	Output Level	dBm		Approx60		
	Connector	upili		BNC		
Pilot output	Load Impedance	Ohm		>5 k		
ι ποι συτμαι				>0 K		Sinusoidal
FUSES	Output Level	Vpp		ı		Jinusolludi
On mains			1 External fuse F	8 I - 5x20 mm	3 External fuse F 10 T - 6x30 mm	
			1 Externat ruse 1		3 EXCEINACTUSE F TO 1 - 0X30 IIIIII	
On services		1	٨		Λ	
On services On PA Supply		i i	Х		4 Internal F 32 A 10x38mm	

All pictures are RVR's property and they are only indicative and not binding. The pictures can be modified without notice. These are general specifications. They show typical values and are subject to change without notice.





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

40138 Bologna Italy



**FM TRANSMITTERS GENERAL CATALOGUE TEX-TFT SERIES** 

# **TEX-TFT** SERIES

**NEXT GENERATION COMPACT** 

from 30W to 5000W

**MODELS** 

TEX32TFT TEX52TFT TEX302TFT TEX502TFT

TEX1002TFT TEX2503TF **TEX1703TFT** 

TEX702TFT TEX2003TFT TEX1003TFT TEX5004TFT







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	<b>30W</b> Compact Stereo Transmitter TFT Edition.
TEX52TFT	<b>50W</b> Compact Stereo Transmitter TFT Edition.
TEX302TFT	<b>300W</b> Compact Stereo Transmitter TFT Edition.
TEX502TFT	<b>500W</b> Compact Stereo Transmitter TFT Edition.
TEX702TFT	<b>700W</b> Compact Stereo Transmitter TFT Edition.
TEX1002TFT	<b>1000W</b> Compact Stereo Transmitter TFT Edition.
TEX1003TFT	<b>1000W</b> High Redundancy Compact Stereo Transmitter TFT Edition.
TEX1703TFT	1700W Compact Stereo Transmitter TFT Edition.
TEX2003TFT	<b>2000W</b> Compact Stereo Transmitter TFT Edition.
TEX2503TFT	2500W Compact Stereo Transmitter TFT Edition.
TEX5004TFT	<b>5000W</b> 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.







### 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.





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



			TEX1002TFT	TEX1003TFT	TEX1703TFT	
Parameters		U.M.	TEXTOOLITT	Value	TEXT/00111	Notes
GENERALS						
Frequency range		MHz		87,5 - 108		
Rated output power		W	10	00	1700	Continuously adjustable from 10 to 100%
Modulation type				F300E		
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 programmab	ility	kHz		10		Step
Frequency stability	Working Temp. from -5°C to 50°C	ppm		±1		
Modulation capability	Refered @ OdBu for 75kHz	kHz		150		Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode		μS		0, 50, 75		Selectable
POWER REQUIREMENTS		140		000 150/		
	AC Supply Voltage	VAC	4.50	230 ±15%	00/0	
	AC Apparent Power Consumption	VA	1450	1550	2260	
AC Power input	Active Power Consumption	W	1447	1500	2210	
	Power Factor	0/		0,998		A II . 180
	Overall Efficiency	%		Typical 70*		* Up to 72 in specific conditions.
MECHANICAL DIMENSIO	Connector			VDE 16A		
PIECHANICAL DIMENSIL	Front panel width	mm / inch		483 / 19		EIA rack
	Front panel height	mm / inch	88 / 3 1/2 2HE	132 / 5	1/4 3HF	
Phisical dimensions	Overall depth	mm	561		64	
	Chassis depth	mm	470		17	
Weight	onaccio acpan	kg	Approx. 12	Approx. 20,50	Approx. 26	
Cooling		ng .	пррток. 12	Forced, with internal fan	Approx. 20	
Acoustic noise		dBA		< 75		
AUDIO INPUTS		ub//		.,,		
	Connector			XLR F		
1.0.114	Туре			Balanced		
Left / Mono	Impedance	Ohm	10 k or 600			
	Input Level /Adjust	dBu		-12 to +12		Continuosly adjustable
	Connector			XLR F		
D: 11	Туре			Balanced		
Right	Impedance	Ohm		10 k or 600		
	Input Level	dBu		-12 to +12		Continuosly adjustable
	Connector			BNC		
MPX	Туре			Unbalanced		
PILY	Impedance	Ohm		10 k		
	Input Level / Adjust	dBu		-12 to +12		For 7,5 KHz FM, adjustable
	Connector			2 x BNC		
SCA/RDS	Туре			Unbalanced		
oury nou	Impedance	Ohm		10 k		
	Subcarier Level @ 0 dBu	dB		-17 to -40		For 7,5 KHz FM, adjustable
	Connector			XLR F		
AES/EBU	Туре			Balanced		
(optional)	Impedance	Ohm		110		
	Input Level / Adjust	dBfs		0 to -10		For 7,5 KHz FM, adjustable
TOS/Link (optional)	Connector			TOSLINK		
	Туре			Optical		
OUTPUTS	Connector		7/8"	7 1	16"	
RF Output	Impedance	Ohm	1/0	50	10	
	Connector	VIIIII		BNC		
RF Monitor	Impedance	Ohm		50		
rivintui	Output Level	dBm		0 ± 4		
	Connector	abiii		BNC		
Pilot output	Load Impedance	Ohm		>5 k		
. not output	Output Level	Vpp		1		Sinusoidal
	OURSUL EUTOL	l Ahh		1		
FUSES						
FUSES On mains			2 E	xternal fuse F 16 A - 6x30 i	mm	
			2 E	xternal fuse F 16 A - 6x30 i	mm	
On mains			2 E		mm	





			TEX2003TFT	TEX2503TFT	TEX5004TFT	
Parameters		U.M.	LALOUGHI	Value	12/3004111	Notes
GENERALS		0.11.		, utuc		110.00
Frequency range		MHz		87,5 - 108		
Rated output power		W	2000	2500	5000	Continuously adjustable from 10 to 100%
Modulation type				F300E		
Operational mode				Mono, Stereo, MP	Χ	
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 programma	ability	kHz		10		
Frequency stability	Working Temp. from -5°C to 50°C	ppm		±1		
Modulation capability		kHz		150		Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode		μS		0, 50, 75		Selectable
POWER REQUIREMEN	TS .	1 1		.,.,		
	AC Supply Voltage	VAC	230 ±15	%	400 ±10%	Monophase   Threephases Y
	AC Apparent Power Consumption	VA	2860	3550	7366	
10 P	Active Power Consumption	W	2854	3543	7352	
AC Power input	Power Factor			0,998		
	Overall Efficiency	%		Typical 70*		*Up to 72 in specific conditions
	Connector		VDE 16/		ILME CFX 4/2	
MECHANICAL DIMENS						
	Front panel width	mm / inch		483 / 19		EIA rack
District dia	Front panel height	mm / inch	132 / 51/4	3HE	177 / 7 4HE	
Phisical dimensions	Overall depth	mm	564		745	
	Chassis depth	mm	517		700	
Weight	·	kg	Approx. 25	Approx. 27,5	Approx 42	
Cooling				Forced, with interna		
Acoustic noise		dBA		< 75		
AUDIO INPUTS						
	Connector			XLR F		
-6/14	Туре		Balanced			
Left / Mono	Impedance	Ohm	10 k or 600			
	Input Level /Adjust	dBu		-12 to +12	Continuosly adjustable	
	Connector			XLR F		
	Туре			Balanced		
Right	Impedance	Ohm		10 k or 600		
	Input Level	dBu	-12 to +12			Continuosly adjustable
	Connector			BNC		* *****
	Туре			Unbalanced		
MPX	Impedance	Ohm		10 k		
	Input Level / Adjust	dBu		-12 to +12		For 7,5 KHz FM, adjustable
	Connector	apu		2 x BNC		,, συμουτούο
	Туре	+		Unbalanced		
SCA/RDS	Impedance	Ohm				
	Subcarier Level @ O dBu	dB	10 k			For 7,5 KHz FM, adjustable
		UB		-17 to -40 XLR F		r or 7,5 kmz rm, aujustable
	Connector					
AES/EBU (optional)	Туре	Ohm		Balanced		
(optional)	Impedance	Ohm		110		For 7 E VIII FM - 4:
	Input Level / Adjust	dBfs		0 to -10		For 7,5 KHz FM, adjustable
TOS/Link (optional)	Connector			TOS-LINK		
	Туре			Optical		
OUTPUTS	Connector		7/16"		7/8"	
RF Output		Ohm	//10	50	//U	
	Impedance	UIIII				
OF Moniter	Connector	01		BNC		
RF Monitor	Impedance	Ohm In-		50		
	Output Level	dBm		0 ± 4		
	Connector	1		BNC		
Pilot output	Load Impedance	Ohm		>5 k		
	Output Level	Vpp		1		Sinusoidal
FUSES			25.	IF A /99	0.51 14 500 500	
On mains		1	2 External fuse F 2	mm Utxo - A c	3 External fuse F 20 T - 10x38 mm	
On services			Х		Х	
On PA Supply On driver supply			Х		χ	
		1	Х		1 Internal Fuse F6,3T 5x20 mm	The second secon







# **PTX-LCD** SERIES

**PROFESSIONAL ANALOGIC** 

from 30W to 150W

**MODELS** 

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





- 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	<b>30W</b> Compact Stereo Transmitter.
PTX50LCD/S	<b>50W</b> 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.





# **PTX-LCD** SERIES



### PTX30LCD/S

30W Compact Stereo Transmitter.





### PTX50LCD/S

**50W** Compact Stereo Transmitter.





# PTX100LCD/S

100W Compact Stereo Transmitter.





# PTX150LCD/S

**150W** Compact Stereo Transmitter.









# **PTX-LCD** SERIES

			PTX30LCD/S	PTX50LCD/S	
Parameters		U.M.	Valu	ie e	Notes
GENERALS		MILE	07 F	100	
Frequency range		MHz	87,5 ÷		Castinuausly adjustable from 10 to 1000/
Rated output power		W	30	50	Continuously adjustable from 10 to 100%
Modulation type		1	Direct carrier	<u> </u>	
Operational mode			Mono, Stereo	· · · · · · · · · · · · · · · · · · ·	
Working temperature		O°C	-5 to -		
Working humidity		%	95		Without condensing
Working altitude		m	Up to	3000	With adequate air evacuation system in site
Frequency programmab	ility	kHz	From softwa	are, with 10	Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm	±	1	
Modulation capability	Refered @ OdBu for 75kHz	kHz	150 Stereo, 20	0 Mono/MPX	Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode		μS	0, 25, 50, (CC	IR), 75 (FCC)	Selectable
POWER REQUIREMENTS	3				
	AC Supply Voltage	VAC	115 - 125 -	230 - 250	
	AC Apparent Power Consumption	VA	135	220	
AC Dower :	Active Power Consumption	W	95	150	
AC Power input	Power Factor		0,	68	
	Overall Efficiency	%	Typical 31	Typical 33	
	Connector		IEC Sta		
MECHANICAL DIMENSIO					
	Front panel width	mm / inch	483 /	/ 19	EIA rack
	Front panel height	mm / inch	88 / 31		
Phisical dimensions	Overall depth	mm	400		
	Chassis depth	mm	389		
Weight		kg	About 10	About 13	
Cooling		a	Forced, with i		
Acoustic noise		dBA	7 orcea, with 1		
AUDIO INPUTS		up/\	< 0	• 	
AUDIO INI OTO	Connector		XLF	R F	
	Туре		Balanced		
Left / Mono	Impedance	Ohm	10 k o		
	Input Level /Adjust	dBu	-13 to		1 dB step adjustable
	Connector	UDU	-13 to		. 25 step adjustants
		1	Balar		
Right	Type Impedance	Ohm	Batar		
			-13 ti		1 dD step adjustable
	Input Level	dBu			1 dB step adjustable
	Connector	1	BN		
MPX	Туре		Unbal	,	
	Impedance	Ohm	10 k		
	Input Level / Adjust	dBu	-13 to	,	1 dB step adjustable
	Connector		3 x E		
SCA/RDS	Туре		Unbala		
CUNINO	Impedance	Ohm	10	k	
	Subcarier Level @ 0 dBu	dB	-17 to	0 -40	Adjustable
	Connector		XLF	R F	
AES/EBU	Туре		Bala	nced	
optional)	Impedance	Ohm	11	0	
T09/Link	Connector		TOS LINK		
TOS/Link (optional)	Туре		Opti		
OUTPUTS	.752		Орб		
	Connector		N t	уре	
RF Output	Impedance	Ohm	5		
	Connector		BN		
RF Monitor	Impedance	Ohm	5		
	Output Level	dBm		x30	
	Connector	uDIII		x30 NC	
Dilet outrot		Ohar			
Pilot output	Load Impedance	Ohm		7 k	
	Output Level	Vpp		1	Sinusoidal
FUEFE					
On mains			1 External fuse		
FUSES On mains On services On PA Supply				F 6,3 T - 5x20 mm X 1 External fuse F 10 A - 5x20 mm	





# **PTX-LCD** SERIES

			PTX100LCD/S	I	PTX150LCD/S	
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		%	95		Without condensing	
Working altitude		m	Up to 3000		With adequate air evacuation system in site	
Frequency programm	ability	kHz		From software, with 10		Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm		±1		
Modulation capability		kHz		150 Stereo, 200 Mono/MPX		Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode	TREATED IN MARKET	μS		0, 25, 50, (CCIR), 75 (FCC)		Selectable
POWER REQUIREMEN	TS	μο		0, 23, 30, (66111), 73 (1 66)		Setectable
I OWEN NEGOINEMEN	AC Supply Voltage	VAC		115 - 125 - 230 - 250		
	AC Apparent Power Consumption	VA	350	110 120 200 200	458	
		-	250		330	
AC Power input	Active Power Consumption	W	0,71		0,72	
	Power Factor	0/	· · · · · · · · · · · · · · · · · · ·			
	Overall Efficiency	%	Typical 40	IECOL III	Typical 45	
MECHANICAL DIMENO	Connector			IEC Standard		
MECHANICAL DIMENS				100 / 10		FIAd.
	Front panel width	mm / inch		483 / 19		EIA rack
Phisical dimensions	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						
	Connector			XLR F		
Left / Mono	Туре		Balanced			
Lett / Mollo	Impedance	Ohm		10 k or 600		
	Input Level /Adjust	dBu		-13 to +14		1 dB step adjustable
	Connector			XLR F		
	Туре		Balanced			
Right	Impedance	Ohm		10 k or 600		
	Input Level	dBu		-13 to +14		1 dB step adjustable
	Connector	ubu		BNC		
				Unbalanced		
MPX	Туре	01				
	Impedance	Ohm		10 k or 50		4.10.4
	Input Level / Adjust	dBu		-13 to +14		1 dB step adjustable
	Connector			3 x BNC		
SCA/RDS	Туре			Unbalanced		
CON INDO	Impedance	Ohm		10 k		
	Subcarier Level @ 0 dBu	dB		-17 to -40		Adjustable
	Connector			XLR F		
AES/EBU	Туре			Balanced		
(optional)	Impedance	Ohm		110		
TOS/Link	Connector			TOS-LINK		
TOS/Link (optional)	Туре			Optical		
OUTPUTS	1740	1		υμιται		
	Connector			N type		
RF Output	Impedance	Ohm		50		
	Connector	5.1111		BNC		
RF Monitor		Ohm		50		
NE MUNICU	Impedance Output Lovel	_				
	Output Level	dBm		Approx30		
	Connector			BNC		
Pilot output	Load Impedance	Ohm		>4.7 k		
	Output Level	Vpp		1		Sinusoidal
FUSES						
On mains				1 External fuse F 6,3 T - 5x20 m	ım	
On services				Х		
On PA Supply				1 External fuse F 10 A - 5x20 n	nm	
On driver supply				Х		





**FM TRANSMITTERS GENERAL CATALOGUE PTX-LCDDSP SERIES** 

# **PTX-LCDDSP SERIES**

**DSP EVOLUTION** 

from 30W to 150W

**MODELS** 

PTX30LCDDSP PTX100LCDDSP PTX50LCDDSP PTX150LCDDSP







- 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	<b>30W</b> Compact Stereo Transmitter.
PTX50LCDDSP	<b>50W</b> 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.





# PTX-LCDDSP SERIES



### PTX30LCDDSP

30W Compact Stereo Transmitter.





### PTX50LCDDSP

50W Compact Stereo Transmitter.





### PTX100LCDDSP

100W Compact Stereo Transmitter.





# PTX150LCDDSP

**150W** Compact Stereo Transmitter.







Phone +39 0516010506 Fax +39 0516011104

sales@rvr.it - www.rvr.it

# PTX-LCDDSP SERIES

			PTX30LCDDSP	PTX50LCDDSP	
arameters		U.M.	Value		Notes
ENERALS					
requency range		MHz	87,5 ÷	08	
Rated output power		W	30	50	Continuously adjustable from 10 to 100%
dodulation type			Direct carrier	frequency	
perational mode			Mono, Stereo,	Multiplex	
Vorking temperature		°C	-5 to +	50	
Working humidity		%	85		Without condensing
Working altitude		m	Up to 30	00	With adequate air evacuation system in site
Frequency programmab	ility	kHz	From software		Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm	±1	,	
Modulation capability	Refered @ OdBu for 75kHz	kHz	150 Stereo, 200	Mono/MPX	Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode		μS	0, 25, 50, (CCIF		Selectable
POWER REQUIREMENTS		Ι μο Ι	0, 20, 00, (00.1	,,, , , , (, , , , , , , , , , , , , ,	Status
	AC Supply Voltage	VAC	115 - 125 -	230 - 250	
	AC Apparent Power Consumption	VA	135	220	
	Active Power Consumption	W	95	150	
C Power input	Power Factor	.,	0,7		
	Overall Efficiency	%	Typical 31	Typical 33	
	,	/0	Typical 31		
IECHANICAL DIMENSIO	Connector	1	ieu Stan	uaiu	
IECHANICAL DIMENSIO	Front panel width	mm / inch	483 /	10	EIA rack
		mm / inch	88 / 3 1/		Enrique
Phisical dimensions	Front panel height		400	L ZIIL	
	Overall depth	mm			
	Chassis depth	mm	389		
Veight		kg	About 10	About 13	
Cooling			Forced, with in	ternal fan	
Acoustic noise		dBA	< 56		
AUDIO INPUTS					
	Connector	1	XLR		
.eft / Mono	Туре		Balanced		
GIC/ PIUIU	Impedance	Ohm	10 k or 600		
	Input Level /Adjust	dBu	-13 to	+14	1 dB step adjustable
	Connector		XLR	F	
	Туре		Balan		
Right	Impedance	Ohm	10 k o		
	Input Level	dBu	-13 to		1 dB step adjustable
	Connector	254	BN		· · · · · · · · · · ·
	Туре		Unbal		
1PX		Ohm	10 k		
	Impedance				1 dD aton adjustable
	Input Level / Adjust	dBu	-13 t		1 dB step adjustable
	Connector		,	BNC	
CA/RDS	Туре			anced	
	Impedance	Ohm	10 k		
	Subcarier Level @ 0 dBu	dB		0 -40	Adjustable
	Connector		XI	R F	
NES/EBU optional)	Туре		Bala	nced	
opcioliac)	Impedance	Ohm	1	10	
OS/Link	Connector		TOS LINK		
optional)	Туре			ical	
OUTPUTS	761	1	ор	·· <del>·</del>	
	Connector		N ·	уре	
RF Output	Impedance	Ohm		50	
	Connector	JIIIII		NC	
r Manitar		06			
F Monitor	Impedance	Ohm		50	
	Output Level	dBm		ox30	
	Connector			NC	
Pilot output	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				Х	
			1 External fuse F 6,3 A - 5x20 mm	1 External fuse F 10 A - 5x20 mm	
On PA Supply			I Externat rade I 0,0 A 0x20 mm	I Externat tuse I TO M - SYZO IIIIII	





# PTX-LCDDSP SERIES

			PTX100LCDDSP		PTX150LCDDSP	
Parameters GENERALS		U.M.		Value		Notes
requency range		MHz		87,5 ÷ 108		
lated output power		W	100		150	Continuously adjustable from 10 to 100%
lodulation type			100	Direct carrier frequency	100	,.,.,.
		-				
Operational mode				Mono, Stereo, Multiplex		
Working temperature		0°C		-5 to + 50		
Working humidity		%		85		Without condensing
Working altitude		m		Up to 3000		With adequate air evacuation system in site
Frequency programma	ability	kHz		From software, with 10		Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm		±1		
Modulation capability	Refered © OdBu 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 REQUIREMEN	TS	μο		0, 20, 00, (0011), 70 (100)		Secretarie
	AC Supply Voltage	VAC		115 - 125 - 230 - 250		
	AC Apparent Power Consumption	VA	350	110 120 200 200	/50	
		-			458	
C Power input	Active Power Consumption	W	250		330	
•	Power Factor		0,71		0,72	
	Overall Efficiency	%	Typical 40		Typical 45	
	Connector			IEC Standard		
IECHANICAL DIMENS	IONS					
	Front panel width	mm / inch		483 / 19		EIA rack
	Front panel height	mm / inch		88 / 3 1/2 2HE		
Phisical dimensions	Overall depth	mm		400		
	Chassis depth	mm		389		
Noight	οπασοίο ασμίπ			About 15		
Weight		kg				
Cooling				Forced, with internal fan		
Acoustic noise		dBA		< 56		
AUDIO INPUTS						
	Connector		XLR F			
Left / Mono	Туре		Balanced			
Lett / Mollo	Impedance	Ohm	10 k or 600			
	Input Level /Adjust	dBu		-13 to +14		1 dB step adjustable
	Connector	ubu		XLR F		
Right	Туре	01		Balanced		
	Impedance	Ohm		10 k or 600		
	Input Level	dBu		-13 to +14		1 dB step adjustable
	Connector			BNC		
ADV	Туре		Unbalanced			
MPX	Impedance	Ohm		10 k or 50		i
	Input Level / Adjust	dBu		-13 to +14		1 dB step adjustable
	Connector	350		3 x BNC		
		-				
SCA/RDS	Туре	0:		Unbalanced		
-	Impedance	Ohm		10 k		
	Subcarier Level @ 0 dBu	dB		-17 to -40		Adjustable
	Connector			XLR F		
AES/EBU	Туре			Balanced		
optional)	Impedance	Ohm		110		
rne/Link	Connector	-		TOS-LINK		
TOS/Link optional)	Туре	+		Optical		
OUTPUTS	ishe	1		υμιιται		
0011 013	Connector			N type		
RF Output		Ohm		50		
	Impedance	Ohm				
	Connector	1		BNC		
RF Monitor	Impedance	0hm		50		
	Output Level	dBm		Approx30		
	Connector			BNC		
Pilot output	Load Impedance	Ohm		>4.7 k		
	Output Level	Vpp		1		Sinusoidal
FUSES	outhor react	Ahh		1		omasolaac
ruses On mains				1 External fuse F 6,3 T - 5x	20 mm	
		+			to mill	
On services				Х		
On PA Supply				1 External fuse F 10 A - 5x	20 mm	
On driver supply				Х		





# PTX-DDS SERIES

**FULL DIGITAL DDS** 

from 30W to 1000W MODELS

# PTX30DDS PTX150DDS PTX1000DDS





R.V.R. Elettronica S.r.l.

Via del Fonditore, 2/2c

40138 Bologna Italy



- 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	<b>30W</b> Compact Stereo Transmitter.
PTX100DDS	100W Compact Stereo Transmitter.
PTX150DDS	<b>150W</b> Compact Stereo Transmitter.
PTX1000DDS	1000W Compact Stereo Transmitter.
OPTION	
/SFN-DDS	Supports SFN applications.
/TLW-DDS-E	WEB & SNMP telemetry extension card.
/TLW-DDS-A0IP	Audio over IP , WEB , SNMP telemetry extension card.
/08-DIG-DDS	Telemetry via parallel interface.
/09-DIG-DDS	Digital telemetry via SCM6 interface.



External 10MHZ cable.

/10MHZ-DDS



# **PTX-DDS** SERIES



### PTX30DDS

30W Compact Stereo Transmitter.





### PTX100DDS

100W Compact Stereo Transmitter.





### PTX150DDS

**150W** Compact Stereo Transmitter.





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

40138 Bologna Italy

## PTX1000DDS

1000W Compact Stereo Transmitter.



# **PTX-DDS** SERIES

			PTX30DDS	PTX100DDS	
Parameters		U.M.	Va	ue	Notes
GENERALS					
Frequency range		MHz	87,5	÷ 108	
Rated output power		W	30	100	Continuously adjustable from 10 to 100%
Modulation type				al Synthesis	
Operational mode			Mono, Stere	o, Multiplex	
Working temperature		°C	-5 to	+ 50	
Working humidity		%	(	5	Without condensing
Working altitude		m	Up to	3000	With adequate air evacuation system in site
Frequency programmabi	ility	kHz	From software, wi	th 1, 10, 100, 1000	Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm	±	1	
Modulation capability	Refered @ OdBu for 75kHz	kHz	15	50	Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode		μS	0, 50 (CCIR),	75 (FCC)	Selectable
POWER REQUIREMENTS					·
	AC Supply Voltage	VAC	115 / 2	30 ±15%	Internal switch
	AC Apparent Power Consumption	VA	280	410	
	Active Power Consumption	W	160	250	
AC Power input	Power Factor		0,57	0,6	
	Overall Efficiency	%	Typical 18	Typical 40	
	Connector	,0		Standard	
MECHANICAL DIMENSIO		1	VDL ILC	otanadiu	1
	Front panel width	mm / inch	483	/ 19	EIA rack
	Front panel height	mm / inch		1/2 2HE	
Phisical dimensions	Overall depth	mm	40	•	
	· ·		38		
Maiahi	Chassis depth	mm			
Weight		kg		ut 10	
Cooling				internal fan	
Acoustic noise		dBA	<	56	
AUDIO INPUTS	•		VI.	D.F.	
	Connector			R F	
Left / Mono	Туре		Balanced		
2011, 110110	Impedance	Ohm	10 k or 600		
	Input Level /Adjust	dBu	-12,5 to +12,5		0,1 dB step adjustable
	Connector		XLR	F	
D:_L.	Туре		Balanced		
Right	Impedance	Ohm	10 k o	r 600	
	Input Level	dBu	-12,5 to	+12,5	0,1 dB step adjustable
	Connector	i i	BN	C	
	Туре		Unbalanced		
MPX	Impedance	Ohm	10		
	Input Level / Adjust	dBu	-12,5 to		0,1 dB step adjustable
	Connector	upu	-12,3 to		-,. 35 step dajastaste
				·	
SCA/RDS	Туре	0.	Unbala		
	Impedance	Ohm		k	
	Subcarier Level @ 0 dBu	dB	-17 to		0,5 dB step adjustable
4 FO /FDU	Connector		XLF		
AES/EBU (optional)	Туре		Balar	nced	
	Impedance	Ohm	11	0	
TOS/Link	Connector		TOS I	lNk	
TOS/Link (optional)	Туре		Optio	cal	
OUTPUTS			· ·		·
	Connector		N ty	pe	
RF Output	Impedance	Ohm	50		
	Connector		BN		
RF Monitor	Impedance	Ohm	50		
a rivinali		dBm			+
	Output Level	UBIII	Approx30	Approx40	
	Connector	01	BN		
Pilot output	Load Impedance	Ohm	>600		
	Output Level	Vpp	2,2		Sinusoidal
FUSES					
On mains		1	1 External fuse F 6		
On services			Х		
On PA Supply			Х		
on i A ouppty					





# **PTX-DDS** SERIES

			PTX150DDS	PTX1000DDS	
Parameters		U.M.	Value		Notes
GENERALS		<sub> </sub>	00.5	00	
Frequency range		MHz	87,5 ÷ 1		
Rated output power		W	150	1000	Continuously adjustable from 10 to 100%
Modulation type		1	Direct Digital S	·	
Operational mode			Mono, Stereo,	·	
Working temperature		°C	-5 to +	50	
Working humidity		%	95		Without condensing
Working altitude		m	Up to 31	000	With adequate air evacuation system in site
Frequency programma	ability	kHz	From software, with	1, 10, 100, 1000	Steps
Frequency stability	Working Temp. from -5°C to 50°C	ppm	±1		
Modulation capability	Refered @ OdBu for 75kHz	kHz	150	)	Meets or exceeds all FCC and CCIR rules
Pre-emphasis mode		μS	0, 50 (CCIR)	, 75 (FCC)	Selectable
POWER REQUIREMENT	TS				
	AC Supply Voltage	VAC	115 / 230 ±15%	80 ÷ 260	Internal switch
	AC Apparent Power Consumption	VA	520	1460	
	Active Power Consumption	W	310	1450	
AC Power input	Power Factor		0,61	0,99	
	Overall Efficiency	%	Typical 48	Typical 70	
	Connector	+	VDE IEC Standard	Terminal Block	
MECHANICAL DIMENS				Tominat Droom	·
	Front panel width	mm / inch	483 /	19	EIA rack
	Front panel height	mm / inch	88 / 3 1/2 2HE	132 / 5 1/4 3HE	
Phisical dimensions	Overall depth	mm	50		
	Chassis depth	mm	38		
Weight	5.143010 doptii	kg	About 10	About 17	
Cooling		ng		internal fan	
Acoustic noise		dBA	< 56	< 65	
		UDA	< 00	< 00	
AUDIO INPUTS	Connector	1	ΥΙ	R F	
			Bal		
Left / Mono	Туре	01			
	Impedance	Ohm	10 k or 600 -12,5 to +12,5		0.1 dD store diseasely
	Input Level /Adjust	dBu			0,1 dB step adjustable
	Connector			LR F	
Right	Туре			lanced	
•	Impedance	Ohm		c or 600	
	Input Level	dBu		to +12,5	0,1 dB step adjustable
	Connector		BNC		
MPX	Туре		Unbalanced		
TH A	Impedance	Ohm		10 k	
	Input Level / Adjust	dBu	-12,5 to +12,5		0,1 dB step adjustable
	Connector			2 x BNC	
004/000	Туре		Un	balanced	
SCA/RDS	Impedance	Ohm		10 k	
	Subcarier Level @ 0 dBu	dB		7 to -40	0,5 dB step adjustable
	Connector			XLR F	
AES/EBU	Туре	+		alanced	
optional)	Impedance	Ohm	U	110	
TOC/Link	Connector	0	TI	DS LINK	
TOS/Link (optional)	Туре			Optical	
OUTPUTS	.75~			·F··,	
	Connector		N type	7/8 type	
RF Output	Impedance	Ohm		50	
	Connector			BNC	
RF Monitor	Impedance	Ohm		50	
	Output Level	dBm	Λn	prox40	
	Connector	upili	νh	BNC	
		Ohm			
Dilet outt	Load Impedance	Ohm	:	>600 k	Circuital
Pilot output				2,2	Sinusoidal
Pilot output	Output Level	Vpp			
FUSES		Vpp	45.	- F / O AT   F::00	
FUSES On mains		Vpp	1 External fus	e F 6,3 AT - 5x20 mm	
·		Vpp	1 External fus	e F 6,3 AT - 5x20 mm X X	





# **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

# **DRT** SERIES

**DAB+ DMB DIGITAL RADIO** 



from 50W to 1000W

**MODELS** 

DRT50 DRT250 DRT700

DRT100 DRT300 DRT1000

**DRT150 DRT500** 





- 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.





# **DRT SERIES**



### DRT50

**50W** Compact Transmitter.





### DRT100

100W Compact Transmitter.





### DRT150

150W Compact Transmitter.





# DRT250

**250W** Compact Transmitter.





#### DRT300

**300W** Compact Transmitter.





# DRT500

**500W** Compact Transmitter.











#### DRT700

700W Compact Transmitter.





#### DRT1000

**1000W** Compact Transmitter.







Parameters   U.M.   Value   Notes				DRT50	DRT100	DRT150	
Nate   Nate			U.M.		Value		Notes
Standards   for DAB/DAB+   CFTSI EN 30040TV1.4.1-30277-2	Frequency range	according standard	MHz		VHF Bd.III from 175 to 240		
Standards	Rated output power	rms	W	50	100	150	
MER	Standards	for DAB/DAB+		DAB-	DAB+ : ETSI EN 300401v1.4.1-302	77-2	
Shoulder (it full power   without Channel Filter   dB   S	Standards :	for DMB			DMB: EN 62516-1:2009		
Operational mode         DAB         Mode I, Mode II, Mode III, III, III, III, III, III, III, II	MER @ full Power		dB		> 34 ( Typical 35)		
Network Mode         DAB-DAB-/ DMB         MFK / SFN           Synchronisation         integrated 6PS Receiver         GPS standard (GLONASS opzion) Nf for ant=mall           Precorrection         linear, non linear         Static, single, continuous, adaptativ=           RF Output connector         Long in the part of	Shoulder @ full power	without Channel Filter	dB		> 38		
Synchronisation         integrated GPS Receiver         GPS standard (GLONASS opzion) Nf for antenna           Precorrection         linear, non linear         static, single, continuous, adaptative           RF Output connector         Image: static single place in the properties of th	Operational mode	DAB			Mode I, Mode II, Mode III, Mode IV		
Precorrection         Unear, non Unear         Static, single, continuous, adaptative           RF Output connector ENVIROMENTAL WORKING PARAMETERS         Nf (DRT50)         Nf (DRT100)         Nf (DRT150)           Temperature/ Humidity         °C / %         -10 to + 45 / 95 relative, no condensing           Working attitude         mt. abst         standard : 2500 / optional: 3000           Cooling         forced air cooling         2 blowers         2 blowers         3 blowers           MECHANICAL DIMENSIONS           Front panel width /height         mm / inch         482.60/ 19" EIA - 2 HE (88.90)         EIA rack           Chassis depth         mm / inch         550 / 21.65         EIA rack           Mains depth         mm / inch         520 / 20.47         About 13         About 13           MAINS POWER REQUIREMENTS           AC Supply Voltage         VAC         single phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Accompany in the phase 230 V / 50Hz	Network Mode	DAB-DAB+ / DMB			MFN / SFN		
Nf (ORT50)	Synchronisation	integrated GPS Receiver		GPS st	andard (GLONASS opzion) Nf for a	ntenna	
Temperature   Humidity	Precorrection	linear, non linear		S	static, single, continuous, adaptati	ve	
Temperature   Humidity		NC DADAMETEDS		Nf (DRT50)	Nf (DRT100)	Nf (DRT150)	
Working altitude		NO PARAMETERS	00/10/	-1(	1 to + 45 / 95 relative no condens	nnis	1
Cooling         forced air cooling         2 blowers         2 blowers         3 blowers           MECHANICAL DIMENSIONS           Front panel width /height         mm / inch         482.60/19" EIA - 2 HE (88.90)         EIA rack           Overall depth         mm / inch         550 / 21.65         EIA rack           Chassis depth         mm / inch         520 / 20.47           Weight         kg         About 11         About 13           MAINS POWER REQUIREMENTS           AC Supply Voltage         VAC         single phase 230 V / 50Hz - 110 V / 60Hz ± 15%           APparent / Active         VA / W-KW         307 /300         355/345         408/400           AC Power Consumption (1a 25°C Temperature)         Power Factor         %         0,98         30-35         30-35         38-40           INPUT / OUTPUT INTERFACES         INPUT / OUTPUT INTERFACES         INPUT / OUTPUT INTERFACES         INPUT / OUTPUT INTERFACES						aniy	<u> </u>
MECHANICAL DIMENSIONS           Phisical dimensions         Front panel width /height   mm / inch   482.60/ 19" EIA - 2 HE (88.90)   EIA rack         EIA rack           Overall depth   0verall depth   0verall depth   mm / inch   550 / 21.65   0verall depth   0		( l: l:	IIIL. adst		·	0.61	
Phisical dimensions         Front panel width /height         mm / inch         482.60/19" EIA - 2 HE (88.90)         EIA rack           MAINS POWER REQUIREMENTS         Weight         kg         About 11         About 11         About 13           AC Supply Voltage         VAC         single phase 230 V / 50Hz - 110 V / 60Hz ± 15%         Apparent / Active         VA/W-KW         307 /300         355/345         408/400           AC Power Consumption (G 25°C Temperature)         Power Factor         %         0,98         0.98           On Mains / on PA         A         6.3 / 10         6.3 / 10         8 / 20           INPUT / OUTPUT INTERFACES         INPUT / OUTPUT INTERFACES		u u		Z blowers	Z blowers	3 Drowers	
Overall depth         mm / inch         550 / 21.65           Chassis depth         mm / inch         520 / 20.47           Weight         kg         About 11         About 13           MAINS POWER REQUIREMENTS           AC Supply Voltage         VAC         single phase 230 V / 50Hz - 110 V / 60Hz ± 15%           Apparent / Active         VA / W-KW         307 /300         355/345         408/400           AC Power Consumption [G 25°C Temperature)         Power Factor         %         0.98           Overall Efficiency (G°C)         %         30-35         30-35         38-40           INPUT / OUTPUT INTERFACES			mm / inch		482.60/ 19" EIA - 2 HE (88.90)		EIA rack
Weight   kg	Phisical dimensions	Overall depth	mm / inch		550 / 21.65		
MAINS POWER REQUIREMENTS           AC Supply Voltage         VAC         single phase 230 V / 50Hz - 110 V / 60Hz ± 15%           ADparent / Active         VA / W- KW         307 /300         355/345         408/400           AC Power Consumption (G 25°C Temperature)         Power Factor         %         0,98           0veralt Efficiency (G°C)         %         30-35         30-35         38-40           1NPUT / OUTPUT INTERFACES         INPUT / OUTPUT INTERFACES		Chassis depth	mm / inch		520 / 20.47		
AC Supply Voltage		Weight	kg	About 11	About 11	About 13	
Apparent / Active   VA / W-KW   307 / 300   355/345   408/400	MAINS POWER REQUIRE						
AC Power Consumption (IG 25°C Temperature)         Power Factor         %         0,98           Overall Efficiency (I0°C)         %         30-35         30-35         38-40           On Mains / on PA         A         6.3 / 10         6.3 / 10         8 / 20           INPUT / OUTPUT INTERFACES		11 /					
Overall Efficiency (0°C)				307 /300		408/400	
On Mains / on PA A 6.3 / 10 8 / 20  INPUT / OUTPUT INTERFACES		Power Factor					
INPUT / OUTPUT INTERFACES	(id 25°C Temperature)	Overall Efficiency (@°C)	%	30-35	30-35	38-40	
			A	6.3 / 10	6.3 / 10	8 /20	
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)				2 x G703 ( BNC 75	Ohm) ,NI (G703), NA5376 (G704), a	auto detection @ 2040 k	xbps ± 50 ppm / 1 x ETI OUT ( BNC 75 0hm)
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 0hm), -25/-62 DbM, gse De-Encapsulation (TS 102606)		/S2 Integrated (option)					
CONTROL/ MONITORING 1 x 10/100/1000 Ethernet (RJ45), WEB GUI SNMP) 3.5 " Colour Touch Screen and buttons	CONTROL/ MONITORING				hernet (RJ45), WEB GUI SNMP) 3.5	5 " Colour Touch Scree	n and buttons
<b>COMPLIANCE &amp; CONFORMITY</b> RED 2014/53/ EU, Safety EN 60215, EMC EN 301-489-1/53, ETSI EN 302 077	COMPLIANCE & CONFOR	MITY		RED 2014/53/ EU, S	Safety EN 60215 , EMC EN 301-489	9-1/53, ETSI EN 302 077	1
AVAILABLE OPTIONS:	AVAILABLE OPTIONS:						
/TWINEDI /RXDVBS2 /RXGLONS /TELEGRAM /SURSATIN /SURLAIN /GPSANTS				/TWINEDI /RXDVB	S2 /RXGLONS /TELEGRAM /SURS	SATIN /SURLAIN /GPS/	ANTS





			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 300401v1.4.1-3027	7-2	
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 ar	ntenna	
Precorrection	linear, non linear			static, single, continuous, adaptati	ve	
RF Output connector			Nf (DRT250)	Nf (DRT300)	DIN 7/16" f (DRT500)	
ENVIROMENTAL WORKIN	NG PARAMETERS					
Temperature/ Humidity		°C / %	-	10 to + 45 / 95 relative, no condens	Ü	
Working altitude		mt. absl		standard : 2500 / optional: 3000		
Cooling	forced air cooling			4 blowers		
MECHANICAL DIMENSIO	NS Front panel width /height	mm / inch		482.60/ 19" EIA - 2 HE [88.90]		EIA rack
Phisical dimensions	Overall depth	mm / inch		550 / 21.65		EIATACK
	Chassis depth					
		mm / inch		520 / 20.47		
MAINS BOWER REQUIRE	Weight	kg		About 15		
MAINS POWER REQUIRE	AC Supply Voltage	VAC	einal	e phase 230 V / 50Hz - 110 V / 60Hz	± 150/.	
	Apparent / Active	VA / W-KW	735/720	845/830	1.32/1.3	
AC Power Consumption	Power Factor	%	700/720	0.98	1.02/1.0	
(@ 25°C Temperature)	Overall Efficiency (@°C)	%		38-40		
	On Mains / on PA	A	8 /20	8 /20	B.16 / 2x20	
INPUT / OUTPUT INTERFA		**	0 / 2 0	0 /20	D.10 / ZAZO	
ETI / EDI INTERFACES /			2 x G703 ( BNC 7	'5 Ohm) ,NI (G703), NA5376 (G704), a	auto detection @ 2040 k	bps ± 50 ppm / 1 x ETI OUT ( BNC 75 0hm)
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 0hm), -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			and buttons
COMPLIANCE & CONFORMITY			RED 2014/53/ EU, Safety EN 60215, EMC EN 301-489-1/53, ETSI EN 302 077			
AVAILABLE OPTIONS:						
			/TWINEDI /RXD	VBS2 /RXGLONS /TELEGRAM /SUR	SATIN /SURLAIN /GPSA	NTS





			DRT700	DRT1000	
Parameters		U.M.	Va	lue	Notes
GENERALS					
Frequency range	according standard	MHz	VHF Bd.III fro	m 175 to 240	
Rated output power	rms	W	700	1000	
Standards	for DAB/DAB+		DAB-DAB+ : ETSI EN 3	00401v1.4.1-30277-2	
Standards :	for DMB		DMB: EN 62	516-1:2009	
MER @ full Power		dB	> 34 ( Typ	iical 35)	
Shoulder @ full power	without Channel Filter	dB	> 3	8	
Operational mode	DAB		Mode I, Mode II,	Mode III, Mode IV	
letwork Mode	DAB-DAB+ / DMB		MFN /	SFN	
Synchronisation	integrated GPS Receiver		GPS standard (GLONAS)	opzion) Nf for antenna	
recorrection	linear, non linear		static, single, con	tinuous, adaptative	
RF Output connector			DIN 7/16" femal	e / EIA 7/8" Flange	
NVIROMENTAL WORKII	NG PARAMETERS				
emperature/ Humidity		°C/%	-10 to + 45 / 95 rel	ative, no condensing	
Vorking altitude		mt. absl	standard : 2500	/ optional: 3000	
ooling	forced air cooling		9 bli	owers	
MECHANICAL DIMENSIO					
hisical dimensions	Front panel width /height	mm / inch	,	A - 4 HE (177.80)	
	Overall depth	mm / inch	635	/ 25	
	Chassis depth	mm / inch	580	/22.83	
	Weight	kg	Ab	out 23	
IAINS POWER REQUIRE	MENTS				
	AC Supply Voltage	VAC		OHz - 110 V / 60Hz ± 15%	
	Apparent / Active	VA / W-KW	1.990 /1.950	2.500 / 2.450	
C Power Consumption	Power Factor	%		0,98	
d 25°C Temperature)	Overall Efficiency (@°C)	%	40	(±5)	
	On Mains / on PA	A	MT Bre	k. 16 / 2x 30	
NPUT / OUTPUT INTERF					
TI / EDI INTERFACES /	ETSI ETS 300 799 v 1.5.1				kbps ± 50 ppm / 1 x ETI OUT ( BNC 75 0hm)
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)				75 Ohm), -25/-62 DbM, gse De-Encaps	
CONTROL/ MONITORING				EB GUI SNMP) 3.5 " Colour Touch Scree	
COMPLIANCE & CONFOR	MITY		RED 2014/53/ EU, Safety EN 60215 ,	EMC EN 301-489-1/53, ETSI EN 302 07	7
AVAILABLE OPTIONS:		· .	Transport Investore Investore In	THE PARTY COURSE THE COURSE WAS A	
			/IWINEUI /RXDVBSZ /RXGLONS /	ELEGRAM /SURSATIN /SURLAIN /GPS	SANIS





# **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 hotpluggable 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** 

TX14KSS

TX02KSS TX03KSS TX04KSS TX05KSS TX7K5SS TX10KSS

TX3K5SS TX07KSS TX12KSS









- 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).





#### TX7K5SS/61D083B

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





#### TX07KSS/61D122B

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





#### TX10KSS/62D084B

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







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



#### TX05KSS/61D082B

Parameters	U.M.	Value	Notes
GENERALS	0.11.	value	Notes
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 } MONO OPERATION		-20,0 dBFS – 0 dBFS (adjustable)	
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	<u> </u>
Frequency response (L or R)	-	71 7	
Linear Cross Talk	dB dB	Typically ± 0,2  Typically > 50	
Non-linear Cross Talk	-		
Stereo Separation (Sine Wave)	dB dB	Typically > 50	
Audio Input Impedance	UB	Typically > 70 600 Ω or 10 kΩ	
Digital Input Impedance		110.0	
orginal impodulico		110 11	1





#### TX10KSS/62D084B

Parameters	U.M.	Value	Notes
GENERALS RF Output Power	kW	10	
Frequency Range	MHz	87.5 – 108	
		07,3 - 100 > 1	
Frequency Stability	ppm	<u> </u>	
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	JD.	Tuning Illury 02	
	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	





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).





**FM STATIONS** 

# **TX-KSS PLUG-IN**

MID/HIGH POWER HOT PLUG

#### from 3000W to 60.000W

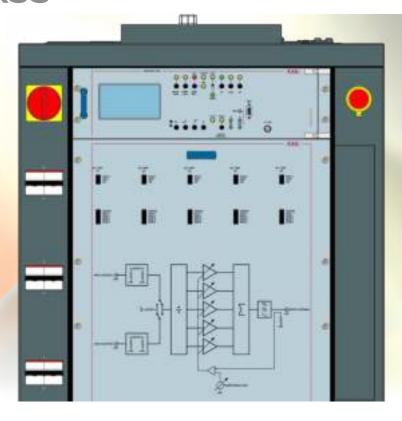
Developed for the most demanding FM Radio Networks, this line of products has been conceived for all stations that needs to ensure broadcast continuity and simplify any maintenance operation. All hot pluggable transmitters exceed ETSI/CCIR/FCC standards on RF harmonics and spurious, performing high efficiency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

MODELS

TX03KSS TX06KSS **TX12.5KSS** TX32KSS TX60KSS

TX04KSS TX08KSS TX20KSS TX40KSS

TX05KSS TX10KSS TX25KSS TX50KSS



Phone +39 0516010506

sales@rvr.it - www.rvr.it

Fax +39 0516011104





- The most reliable FM broadcasting solution on the market designed for 24/7 nonstop 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.

R.V.R. Elettronica S.r.l.

Via del Fonditore, 2/2c

40138 Bologna Italy

• Low distortion and intermodulation values.

# **Amplifiers:**

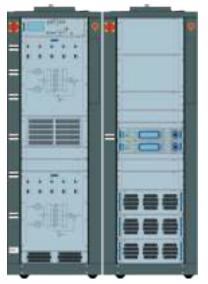
- Hot Plug-in modules available in 2.300W or 2.500W depending on system's configuration.
- Independent power supply per each amplifier's module.
- Independent fan array per each amplifier's module.
- Automatic Power Control.
- Advanced protections against high VSWR, overdrive, overcurrent and overtemperature.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













## 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).







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



#### TX10KSS/60D41

Parameters	U.M.	Value	Notes
GENERALS RF Output Power	kW	10.5	
	MHz	87.5 – 108	
Frequency Range			
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 } MONO OPERATION		-20,0 dBFS – 0 dBFS (adjustable)	
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)	W %	Typicatty > 0.0	
		1 /	1
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	





#### TX60KSS

LVOOKOO				
Parameters		U.M.	Value	Notes
GENERALS				
RF Output Power		kW	65	
Frequency Range		MHz	87,5 – 108	
Frequency Stability		ppm	± 1	
Driver power for rate	d output	W	100	
Nominal Frequency D	eviation		±75 KHz (peak)	
Maximum Frequency	Deviation		±150 KHz (peak)	
Class of Emission			180KF8E Direct to Channel	
Modulation Mode			Mono, Stereo, Multiplex	
Stereo transmissions	S		Ace to ITU-R / Ree 450 (Pilot tone)	
RF Output Impedance		0	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		dB	Typically > 55	
Harmonics suppressi		dB	Typically <85	
Overall efficiency	on and openious	- UD %	Typicatly <05 Typically > 72-74	
RF Harmonics		70	Exceeds ETSI/CCIR/FCC requirements	
RF Spurious		_	Exceeds ETSI/CCIR/FCC requirements	
	{+75 Khz (peak) deviation }	_	-12,5 dBu - +12,5 dBu (adjustable)	
	75 Khz (peak) deviation }	_	-20,0 dBFS - 0 dBFS (adjustable)	
POWER REQUIREMEN			-20,0 abi 5 - 0 abi 5 (aujustable)	
	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	
AC power input	Overall efficiency	%	Typically > 72-74	
	Power factor	dB	> 0,95	
	Connector		Terminal Block Standard	
MECHANICAL DIMENS				
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		dD.	Tunically > 02	
Total Harmonic Disto	ation Maio	dB %	Typically > 83 Typically < 0,03	
Inter Modulation Dist Frequency Response	TORTION SMPTE	%	Typically <0,02	
Audio Input Impedan		dB	Typically ±0,2 600 Ω or 10 kΩ	
MPX OPERATION	се		000 II 01 10 KII	
Composite S/N ratio		dB	Typically > 80	
Total Harmonic Disto	rtion + Noise	%	Typically < 0,05	
Inter Modulation Dist		%	Typically <0,05	
Frequency Response		dB	Typically ±0,05	
Audio Input Impedanc	ce control	kΩ	10	
STEREO OPERATION				
Stereo FM S/N Ratio		dB	Typically > 83	
Total Harmonic Disto	rtion + Noise (L or R)	%	Typically <0,02	
Inter Modulation Disto	ortion SMPTE (L or R)	%	Typically <0,02	
Frequency response		dB	Typically ±0,2	
Linear Cross Talk		dB	Typically > 50	
Non-linear Cross Tall	k	dB	Typically > 50	
Stereo Separation (Si		dB	Typically > 30	
Audio Input Impedan		UD	600 Ω or 10 kΩ	
Digital Input Impedar		Ω	110	
pigitat input inipedal	100	111	110	





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).





# **TX-KSS PLUG-IN NEXT GEN**

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 TX08KSS TX05KSS **TX10KSS** 

TX06KSS TX12.5KSS



Phone +39 0516010506

sales@rvr.it - www.rvr.it

Fax +39 0516011104





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.







- Each power supply "PS" can be removed or plugged without turning off the transmitter.
- The transmitter is capable of generating an output power with ample 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).







#### 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 rate	d 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 suppressi	ion and Spurious		Typically <85db		
RF Harmonics			Exceeds ETSI/CCIR/FCC requirements		
RF Spurious			Exceeds ETSI/CCIR/FCC requirements		
Environmental worki	ng conditions	T i	-10 °C to + 50 °C / 95% relative Humidity non condensing		
POWER REQUIREMEN	ITS				
	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		
AC Power Input	Active Power Consuption		about 8350W		
	Power factor		> 0.95		
	Overall Efficiency		71/73 %		
	Connector		Terminal Block Standard		
MECHANICAL DIMENS	SIONS		/0 /05 4005 4000		
Phisical Dimensions		LxHxW	40u 685 mm x 1935 mm x 1000 mm		
Mr.:-La			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)		
ni vatput			20 Ollili (1+2/0 Elvi Italiye type)		

#### TX08KSS/60D43/EPS

1700100/00D40/EI				
Parameters		U.M.	Value	Notes
GENERALS				,
RF Output Power			8kW + 10%	
Frequency Range		MHz	87,5 – 108	
Driver power for rated	l output	W	30	
VSWR			1.4:1 with automatic fold-back at higher VSWR	
Asynchronous AM S/N	l Ratio		Typically >70dB	
Synchronous AM S/N	Ratio		Typically > 55dB	
Harmonics suppression	on and Spurious		Typically <85db	
RF Harmonics			Exceeds ETSI/CCIR/FCC requirements	
RF Spurious			Exceeds ETSI/CCIR/FCC requirements	
Environmental working	g conditions		-10 °C to + 50 °C / 95% relative Humidity non condensing	
POWER REQUIREMENT	TS			
			400V ±10% AC Three-Phase 3F+N	
	AC Supply Voltage		230V ±10% AC Three-Phase 3F+N	
			230V ±10% AC Mono-Phase 50/60 Hz	
AC Power Input	Active Power Consuption		about 11.100W	
	Power factor		> 0.95	
	Overall Efficiency		71/73 %	
	Connector		Terminal Block Standard	
MECHANICAL DIMENS	IONS		40u 685 mm x 1935 mm x 1000 mm	
Phisical Dimensions	Phisical Dimensions			
W-:-L1		_	32u 685 mm x 1620 mm x 1000 mm	
Weight		_	about 290 kg	
Cooling			Forced, with internal fan	
Acoustic Noise OUTPUTS			< 75 dBA	
RF Output			50 Ohm (1+5/8" EIA flange type)	
Jusput			00 0mm (1 0/0 Em 1 mm go 1/po)	





#### TX10KSS/60D41/EPS

1X10K33/00D41/L	13			
Parameters		U.M.	Value	Notes
GENERALS				
RF Output Power			10kW + 10%	
Frequency Range		MHz	87,5 – 108	
Driver power for rate	d 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 suppressi	ion and Spurious		Typically <85db	
RF Harmonics			Exceeds ETSI/CCIR/FCC requirements	
RF Spurious			Exceeds ETSI/CCIR/FCC requirements	
Environmental worki	ng conditions	T I	-10 °C to + 50 °C / 95% relative Humidity non condensing	
POWER REQUIREMEN	ITS			
			400V ±10% AC Three-Phase 3F+N	
	AC Supply Voltage		230V ±10% AC Three-Phase 3F+N	
			230V ±10% AC Mono-Phase 50/60 Hz	
AC Power Input	Active Power Consuption		about 14.100W	
	Power factor		> 0.95	
	Overall Efficiency		71/73 %	
	Connector		Terminal Block Standard	
MECHANICAL DIMENS	SIONS		/0 /0F 400F 4000	
Phisical Dimensions		LxHxW	40u 685 mm x 1935 mm x 1000 mm	
Waish4			32u 685 mm x 1620 mm x 1000 mm	
Weight			about 360 kg	
Cooling			Forced, with internal fan	
Acoustic Noise OUTPUTS			< 75 dBA	
RF Output			50 Ohm (1+5/8" EIA flange type)	
Juspus			00 01111 (1 0/0 E111101190 1/P0)	

#### 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 R	Ratio		Typically > 55dB			
Harmonics suppressio	n 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						
			400V ±10% AC Three-Phase 3F+N			
	AC Supply Voltage		230V ±10% AC Three-Phase 3F+N			
			230V ±10% AC Mono-Phase 50/60 Hz			
AC Power Input	Active Power Consuption		about 17.200W			
	Power factor		> 0.95			
	Overall Efficiency		71/73 %			
	Connector		Terminal Block Standard			
MECHANICAL DIMENSI	ONS		40u 685 mm x 1935 mm x 1000 mm			
Phisical Dimensions	Phisical Dimensions					
Weight			32u 685 mm x 1620 mm x 1000 mm about 380 kg			
Weight		_				
Cooling			Forced, with internal fan			
Acoustic Noise OUTPUTS			< 75 dBA			
RF Output			50 Ohm (1+5/6" EIA flange type)			
varpar			(			





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.



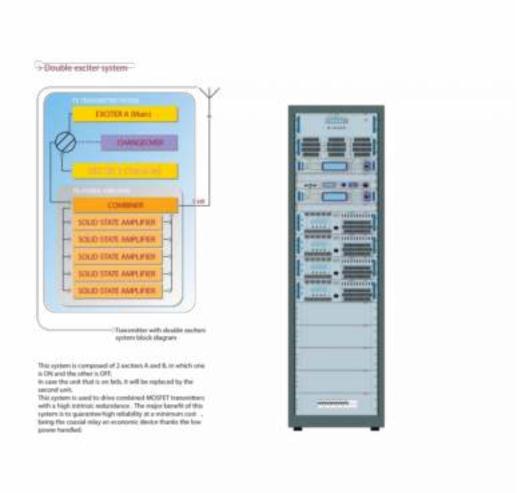


# REDUNDANT TRANSMITTERS SYSTEM

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.

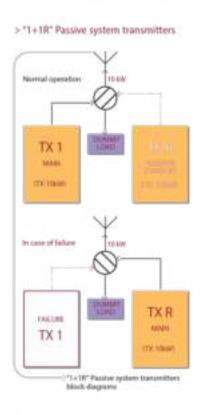






# "1+1R" Passive system transmitters

This system is composed of 2 transmitters, A and B, inwhich I 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



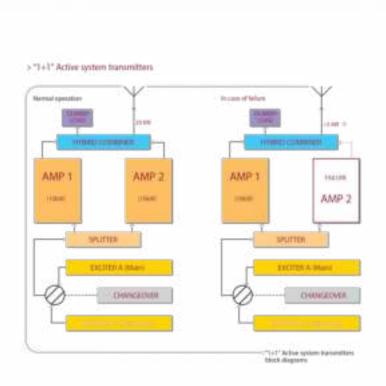






# "1+1R" Active system transmitters

This system is composed of 2 transmitters, A and B, in which I 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.



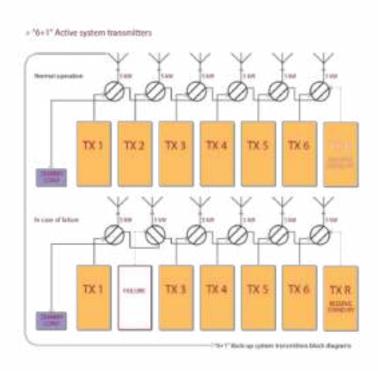






# "6+1R"Activesystem transmitters

This system is composed of "N" transmitters connected to the antenna and I 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.







# **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

- 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.

Model Desc	scription			
PJ1000LIGHT 1000	<b>1000W</b> High Redundancy Compact Stereo Amplifier.			
PJ2500LCD 2500	DOW Compact Stereo Amplifier.			
PJ3500LCD 3500	DOW Compact Stereo Amplifier.			

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





# PJ-LIGHT - PJ-LCD SERIES



## PJ1000LIGHT

**1000W** High Redundancy Compact Amplifier.





### PJ2500LCD

**2500W** Compact Amplifier.





## PJ3500LCD

**3500W** Compact Amplifier.





#### PJ1000LIGHT

Parameters		U.M.	Value	Notes	
GENERALS			00.5		
Frequency range		MHz	87,5 ÷ 108		
Rated output power		W	1000		
Spurious & harmonic s	uppression	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 REQUIREMENT		140	000 450/		
	AC Supply Voltage	VAC	230 ±15%	<u> </u>	
	AC Apparent Power Consumption	VA	1650	Monophase	
AC Power input	Active Power Consumption	W	1630		
no ronor input	Power Factor		0,998		
	Overall Efficiency	%	Typical 70		
	Connector		Terminal Block		
MECHANICAL DIMENSI					
	Front panel width	mm / inch	483 / 19	EIA rack	
Phisical dimensions	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 befor	e protection	W	25		
OUTPUTS	0		B/4/H F1A		
RF Output	Connector	01	7/16" EIA		
	Impedance	Ohm	50		
RF Monitor	Connector		BNC		
	Impedance	Ohm	50		
Output Level		dBc	Approx60		
FUSES			2 Futarnal funa F 2F T 10v20 mm		
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		Х			





# PJ-LIGHT - PJ-LCD SERIES

		PJ2500LCD		PJ3500LCD		
Parameters		U.M.	Val	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	9	°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 REQUIREMEN						
	AC Supply Voltage	VAC	230 ±15%	231	0 +10% -15%   400 +10% -15%	Monophase   Threephases Y
	AC Apparent Power Consumption	VA	3578		4996	
AC Dower innut	Active Power Consumption	W	3571		4987	
AC Power input	Power Factor		0,998			
	Overall Efficiency	%	Typical 70			
	Connector		Terminal Block			
MECHANICAL DIMENS	SIONS					
	Front panel width	mm / inch	483	/ 19		EIA rack
	Front panel height	mm / inch	132 / 3 1/2 3HE			
Phisical dimensions	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	5	0		
Driver power for rated output		W	30			
Max input power befo OUTPUTS	ore protection	W		5		
RF Output	Connector		7/8" EIA			
	Impedance	Ohm	50			
RF Monitor	Connector		BNC			
	Impedance	Ohm	50			
	Output Level	Level dBc Approx60				
FUSES			051 16 5057 10 00			
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		χ	
On PA Supply			4 Internal F 25 A 10x38mm		4 Internal F 32 A 10x38mm	
On aux VDE socket			Х		Х	





FM AMPLIFIERS

PLUG-IN SERIES

GENERAL CATALOGUE

# **PJ-KPS-CA PLUG-IN** SERIES

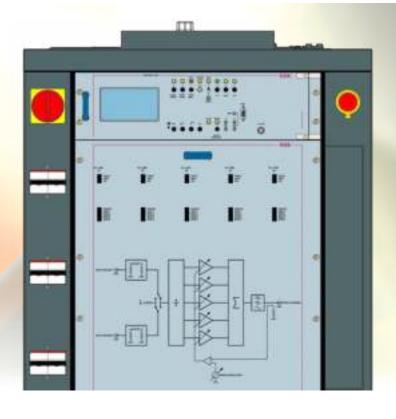
MID/HIGH POWER HOT PLUG

from 3000W to 60.000W

**MODELS** 

PJ03KPS-CA
PJ04KPS-CA
PJ05KPS-CA
PJ06KPS-CA
PJ08KPS-CA
PJ10KPS-CA
PJ10KPS-CA

PJ20KPS-CA PJ25KPS-CA PJ32KPS-CA PJ40KPS-CA PJ50KPS-CA PJ60KPS-CA







- 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.





# **PLUG-IN SERIES**



# PJ10KPS-CA

10.000W PLUG-IN System.



# PJ20KPS-CA

20.000W PLUG-IN system.



# PJ60KPS-CA

60.000W PLUG-IN System.





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







# **PLUG-IN SERIES**

### 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	
UKDEKING INFURMATION	
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	<b>25.000W</b> PLUG-IN System.
PJ32KPS-CA	32.000W PLUG-IN System.
PJ40KPS-CA	40.000W PLUG-IN System.
PJ50KPS-CA	<b>50.000W</b> PLUG-IN System.
PJ60KPS-CA	<b>60.000W</b> PLUG-IN System.





# **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  $\div$  400 MHz and from 800  $\div$  960 MHz with an adjustable power from 0 to 20W and various optional accessories.

**MODELS** 

# PTRL-LCD RXRL-LCD









- STL robust and reliable, simple to use.
- Standard working frequency bands that include, depending on the model, the VHF-UHF (200  $\div$  400, 800  $\div$  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	<b>20W</b> 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.







# 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.



# PTRL - RXRL

# PTRL-LCD

PIRL-LCD		11.54	Val	Natas
Parameters GENERALS		U.M.	Value	Notes
Frequency range	Work bandwith is 20MHz	MHz	940 ÷ 960	
Rated output power	Work ballawith is zorniz	W	20	Continuously adjustable from 10 to 100%
Modulation type		**	Direct carrier frequency	Continuously adjustable from 10 to 100 //
Operational mode			Mono, Multiplex	
Ambient working tempera	ture	°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 @ OdBu for 75kHz	kHz	130	Meets or exceeds all FCC and CCIR rules
Pre-emphasis		μS	0, 50 (CCIR), 75 (FCC)	Selectable
Spurious & harmonic supp		dBc	<73	
	io Referred to 100% AM, with no de-emphasis		≥60	
	Referred to 100% AM, FM deviation 75 kHz	dB	>50	
POWER REQUIREMENTS	by 400Hz sine, without de-emphasis		00 0/0	l ru
	AC Supply Voltage	VAC	80 ÷260	Full range
	AC Apparent Power Consumption	VA	120	
AC Power input	Active Power Consumption Power Factor	W	70 0.5	
-	Overall Efficiency	%		
	Connector	70	Typical 50 VDE IEC Standard	
	DC Supply Voltage	VDC	24	
DC Power input	DC Current	ADC	5	
MECHANICAL DIMENSIONS		7100	·	
	Front panel width	mm / inch	<b>483</b> / 19	EIA rack
Dhining dimensions	Front panel height	mm / inch	88 / 31/2	2HE
Phisical dimensions	Overall depth	mm	394	
	Chassis depth	mm	372	
Weight		kg	About 7	
Cooling			Forced, with internal fan	
Acoustic noise		dBA	< 58	
AUDIO INPUTS			W.D.F	
	Connector		XLR F Balanced	
Left / Mono	Туре	Ohm		
	Impedance Input Level /Adjust	dBu	10 k or 600 -13 to +13	Continuosly adjustable
	Connector	ubu	XLR F	Cultilluosty aujustable
	Туре		Balanced	
Right	Impedance	Ohm	10 k or 600	
	Input Level	dBu	-13 to +13	Continuosly adjustable
	Connector		BNC	, ,
MDV	Туре		Unbalanced	
MPX	Impedance	Ohm	10 k or 50	
	Input Level / Adjust	dBu	-13 to +13	Continuosly adjustable
	Connector		2 x BNC	
SCA/RDS	Туре		Unbalanced	
OUNTROO	Impedance	Ohm	10 k	
CHITCHITC	Input Level / Adjust	dBu	-8 to +13	For 7,5 KHz FM, adjustable
OUTPUTS	C		N type	
RF Output	Connector	Oh	50	
	Impedance Connector	Ohm	BNC	
RF Monitor	Impedance	Ohm	50	
AT PIUIILUI	Output Level	dB	Approx30	
	Connector	uD	Х	
Pilot output	Load Impedance	Ohm	X	
	Output Level	Vpp	X	Sinusoidal
FUSES	·			
On mains			1 External fuse F 3,15 T - 5x20 mm	
On services			Х	
On PA Supply			Х	
On driver supply			χ	
,				





# **PTRL - RXRL**

### RXRL-LCD

KXKL-LUU				
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 temperat	ure	O°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 Cumply Voltage	VAC	80 ÷260	Full yanga
	AC Supply Voltage	VAC	80 ÷200 25	Full range
	AC Apparent Power Consumption	VA		
AC Power input	Active Power Consumption	W	20	
	Power Factor	0/	0,8	
	Overall Efficiency	%	Typical 50	
	Connector	LUDO	VDE IEC Standard	
DC Power input	DC Supply Voltage	VDC	24	
·	DC Current	ADC	< 2 A	
MECHANICAL DIMENSIONS				
	Front panel width	mm / inch	483 / 19	EIA rack
Phisical dimensions	Front panel height	mm / inch	88 / 31/2	2HE
	Overall depth	mm	394	
	Chassis depth	mm	372	
Weight		kg	About 5	
Cooling			Convection cooling	
Acoustic noise		dBA	Х	
AUDIO INPUTS				
RF Input	Connector		N type	
·	Impedance	Ohm	50	
OUTPUTS	Connector		XLR F	
	Type		Balanced	
Left / Mono	_11	Ohm	100	
	Impedance Output Level /Adjust @ 75KHz dev	dBu	-10 to +14	Continuody adjustable
		UDU	-10 t0 +14 XLR F	Continuosly adjustable
	Connector		XLK F Balanced	
Right	Type	Ob	Balanced 100	
	Impedance Output Level /Adjust @ 75KHz devl	Ohm dBu	-10 to +14	Continuosly adjustable
		UBU	-10 to +14 2 x BNC	continuosty aujustable
	Connector			
MPX	Type	Ob	Unbalanced	
	Impedance Output Level /Adjust @ 75KHz dev	Ohm	100	For 7F VIII FM adjustable
		dBu	-20 to +13	For 75 KHz FM, adjustable
SCA	Connector		2 x BNC	
	Туре	01	Unbalanced	
	Impedance	Ohm	100	Malanda abada faraba 7 FMII daribbar
FUSES	Output Level /Adjust @ 75KHz dev	dB	-20 to +7	Value to check for the 7.5KHz deviation
On mains			1 External fuse F 3,15 T - 5x20 mm	
On services			X	
On PA Supply			Х	
On driver supply			Х	





# 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** 

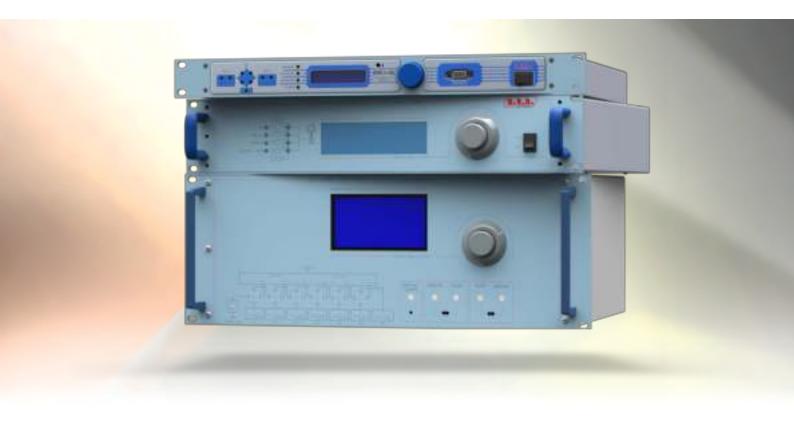
TLK - /TLW-E

# **CHANGEOVER UNITS SYSTEM**

SCM

**MODELS** 

SCMLCD1+1 SCML1+1SL SCMLCDN+1 SCMMAN1+1/158 SCM6-1







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 OW 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	

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







# SCMLCD1+1

Changeover Units System.

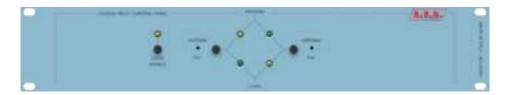




# SCML1+1SL

Changeover Units System.





# SCMMAN1+1/158

Changeover Units System.





# SCMLCDN+1

Changeover Units System.





# SCM6-1

Changeover Units System.





# SCMLCD1+1

AC Power input  AC Apparent power consumption Connector  DC Power input  DC Supply voltage DC Current  MECHANICAL DIMENSIONS  Phisical dimensions  L x H x W  Mm / inch Mg About 4  Cooling Acoustic noise ABA  ACOutine by ABA  ACOUTINE ABA  ACOUTINE ABA  ABA  ACOUTINE A	OUNTEDDINI				
Integrated coax-retè	Parameters			Value	Notes
Ambient working temperature	GENERALS				
POWER REQUIREMENTS  AC Supply voltage	Integrated coax-relè	Only / V2		Yes	
AC Power input  AC Apparent power consumption Connector  DC Power input  DC Supply voltage DC Current  MECHANICAL DIMENSIONS  Phisical dimensions  L x H x W  Mm / inch Mg About 4  Cooling Acoustic noise ABA  ACOutine by ABA  ACOUTINE ABA  ACOUTINE ABA  ABA  ACOUTINE A	Ambient working tempera	ture		-10 °C to + 50 °C / 95%	Relative humidity non condensing
AC Power input  AC Apparent power consumption Connector  DC Power input  DC Supply voltage DC Current  AC Apparent power consumption DC Courrent  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC Apparent power consumption DC Supply voltage DC Current  AC APPA Supply  AC Apparent power consumption DC Supply voltage DC Current AC VOIC SUPPLIES Standard  AC APPA Supply  AC Apparent power consumption DC Supply Voltage DC Current AC VOIC SUPPLIES Standard  AC APPA Supply	POWER REQUIREMENTS				
Connector VDE IEC Standard  DC Power input  DC Supply voltage DC Current A  MECHANICAL DIMENSIONS  MECHANICAL DIMENSIONS  Phisical dimensions L x H x W  mm / inch Mg About 4  Cooling Convection cooling Acoustic noise AUDIO INPUTS Analog Bigital / Analog Bigital inputs depending by expansion card number.  OUTPUTS  Relay  Relay		AC Supply voltage		115 - 125 - 230 - 250 VAC ±15%	
DC Power input    DC Supply voltage	AC Power input	AC Apparent power consumption	W		
MECHANICAL DIMENSIONS		Connector		VDE IEC Standard	
MECHANICAL DIMENSIONS  Phisical dimensions L x H x W mm / inch 88 / 3 1/2 2HE  Weight kg About 4  Cooling Convection cooling  Acoustic noise Adulto INPUTS  Analog 8 ÷ 32 Analog inputs depending by expansion card number.  Digital / Analog OUTPUTS  Relay 8 ÷ 32 Analog 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	DC Power input	DC Supply voltage		24 VDC	
Phisical dimensions  L x H x W  mm / inch mm /		DC Current		Α	
Phisical dimensions  L x H x W  mm / inch mm /					
Phisical dimensions  L X H X W  mm / inch  kg About 4  Cooling Convection cooling Acoustic noise AUDIO INPUTS Analog Digital / Analog Digital inputs depending by expansion card number.  DIGITAL DI	MECHANICAL DIMENSIONS				
Weight         kg         About 4         ZHE           Cooling         Convection cooling         About 4           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         9         Analog inputs depending by expansion card number.           FUSES         1 External fuse 4 A F - 5X20 mm         On services         X           On PA Supply         X         On PA Supply         X	Dhicical dimensions	I v H v W	-		
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		LXIIXW	mm / inch		2HE
Acoustic noise         dBA         0           AUDIO INPUTS         8 ÷ 32         Analog inputs depending by expansion card number.           Digital / Analog         16 ÷ 64         Digital inputs depending by expansion card number.           OUTPUTS         8 ÷ 32         Analog inputs depending by expansion card number.           FUSES         8 ÷ 32         Analog inputs depending by expansion card number.           FUSES         1 External fuse 4 A F − 5X20 mm         On services         X           On PA Supply         X         Control of the cont			kg		
AUDIO INPUTS         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         Texternal fuse 4 A F − 5X20 mm         On services         X           On PA Supply         X         Conservices	Cooling			Convection cooling	
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 PA Supply	Acoustic noise		dBA	0	
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         Conservices         X           On PA Supply         X         Conservices         X	AUDIO INPUTS				
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	Analog			8 ÷ 32	Analog inputs depending by expansion card number.
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	Digital / Analog			16 ÷ 64	Digital inputs depending by expansion card number.
FUSES           On mains         1 External fuse 4 A F - 5X20 mm           On services         X           On PA Supply         X	OUTPUTS				
On mains         1 External fuse 4 A F - 5X20 mm           On services         X           On PA Supply         X	Relay			8 ÷ 32	Analog inputs depending by expansion card number.
On services X On PA Supply X	FUSES				
On PA Supply X	On mains			1 External fuse 4 A F - 5X20 mm	
117	On services				
On driver supply X	On PA Supply				
	On driver supply			Х	

## SCML1+1SL

SCML I+ ISL				
Parameters			Value	Notes
GENERALS				
Integrated coax-relè	only / V2		Yes	
Ambient working temperatu	re		-10 °C to + 50 °C / 95%	Relative humidity non condensing
POWER REQUIREMENTS				
	AC Supply Voltage		115 - 125 - 230 - 250 VAC ±15%	
AC Power input	AC Apparent Power Consumption	W		
	Connector		VDE IEC Standard	
DC Power input	DC Supply Voltage		24 VDC	
	DC Current		A	
MECHANICAL DIMENSIONS				
Phisical dimensions	LxHxW	mm / inch	483 / 19	EIA rack
	EXIIXII	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			0 (6 0)/0	
Relay			Specific RVR connectors	
INTERFACES				
User interface			LCD - 2 x 16 with Encoder	
Signalling LEDs / Synoptical			Yes	
I2C TC/TS			Yes Yes	
			res	
FUSES On mains			1 External fuse 1,6 A T - 5X20 mm	
On services			X X	
			Х	
On PA Supply			Х	
On driver supply			۸	





# SCM

### SCMMAN1+1/158

Parameters			Value	Notes
GENERALS				
Ambient working temperatur	e		-10 °C to + 50 °C / 95%	Relative humidity non condensing
POWER REQUIREMENTS				
	AC Supply Voltage		115 - 230 VAC ±15%	
AC Power input	AC Apparent Power Consumption	W	2	
	Connector		Terminal Block (L-N-PE)	
MECHANICAL DIMENSIONS				
Phisical dimensions	LxHxW	mm / inch	483	EIA rack
	LX II X VV	mm / inch	88 / 31/2	2HE
Weight		kg	About 0,3	
Cooling			Convection cooling	
Acoustic noise		dBA	0	
INTERFACES				
	LOCAL	mm	Yellow 5	
Signalling LEDs / Synoptical	TX1 to ANT	mm	2 x Green 5	
Jighatting LLD3 / Jyhopticat	TX2 to ANT	mm	2 x Yellow 5	
Push button	LOCAL ENABLE		Used for enabling change whith push b	outton
Push button	TX1 to ANT		Used for change Relay in a POS1	
	TX2 to ANT		Used for change Relay in a POS2	
AUDIO INPUTS				I
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			Х	
On PA Supply			Х	
On driver supply			Х	

# 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 Supply voltage 115 - 125 - 230 - 250 VAC ±15%	
AC Power input 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/Z   ZHE	
Weight kg About 4	
Cooling Convection cooling	
Acoustic noise dBA 0	
AUDIO INPUTS	
Analog8 ÷ 32Analog inputs depending by expansion card number	
Digital / Analog $16 \div 64$ Digital inputs depending by expansion card number	
OUTPUTS	
<b>Relay</b> 8 ÷ 32 Analog inputs depending by expansion card number	
INTERFACES	
User interface Graphical LCD - 128 x 64 with Encoder	
Signalling LEDs / synoptical Yes	
12C Yes	
<b>RS232</b> Yes	
FUSES	
On mains         1 External fuse 4 A F - 5X20 mm	
On services X	
On PA Supply X	
On driver supply X	





# SCM6/1

30110/1				
Parameters			Value	Notes
GENERALS				
Ambient working temperatur	e		-10 °C to + 50 °C / 95%	Relative Humidity non condensing
POWER REQUIREMENTS				
	AC Supply voltage		115 - 125 - 230 - 250 VAC ±15%	
AC Power input	AC Apparent power consumption	W	50	
7.0 T OWO! IIIput	Connector		VDE IEC Standard	
DO D	DC Supply voltage		24 VDC	
DC Power input	DC Current		<2 a	
MECHANICAL DIMENSIONS				
District discounting	LxHxW	mm / inch	483	EIA rack
Phisical dimensions	LXHXW	mm / inch	176 / 31/2	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 Encode	er -
Signalling LEDs / synoptical			Yes	
TC/TS			Yes	
FUSES				
On mains			1 External fuse 4 A - 5X20 mm	
On services			Х	
On PA Supply			Х	
On driver supply			Χ	





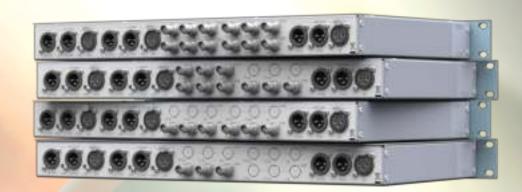
# **CHANGEOVER ACCESSORIES**

AUD - SCM - RDS

**MODELS** 

AUD6/1 AES6/1 RDS6/1

AUD2P1 AUD2MP1 SCM-AUD



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.





# **AUD - SCM - RDS**



### 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.





# **AUD - SCM - RDS**

### SCM-AUD

Parameters			Value	Notes
GENERALS				
Ambient working temperature			-10 °C to + 50 °C / 95%	Relative humidity non condensing
POWER REQUIREMENTS			10 0 10 00 07 70 10	,
	AC Supply Voltage	I	80 - 260 VAC	Full Range Monophase
AC Power input	Active Power Consumption		5W	
	Connector		VDE IEC Standard	
MECHANICAL DIMENSIONS		'		
Phisical dimensions	x H x W	mm / inch	483 / 19	EIA rack
	_ X H X W	mm / inch	44 / 31/2	1HE
Weight		kg	About 1,4	
Cooling			Convection cooling	
Acoustic noise		dBA	0	
AUDIO INPUTS				
	Connector		XLR female Balanced	
	Passthrough Gain		±7dB adjustable	
L&R (from 1 to 4)	Impedance		10K-600-2K Ω selectable	
	Maximum input level	dBu	20	
	Connector		BNC Unbalanced	
MPX & PILOT	Passthrough Gain		±7dB adjustable	
MPA & PILUI	Impedance		50 - 10K Ω selectable	
	Maximum input level	dBu	14	
OUTPUTS	·			
	Connector		XLR male Balanced	
L&R (from 1 to 4) L&R Reserve	Maximum Level	dBu	20	
	Load		> 2K N	
	Connector		BNC Unbalanced	
MPX & PILOT	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

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





# **AUD - SCM - RDS**

### 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 / 31/2	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
organically LLD		Position	6 Yellow
COMMAND		IN	DB25 Female (SCM6/1 interface)
OUTHINID		OUT	DB25 Male (RDS6/1 interface)

## AES6/1

AE20/ I			
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 88 / 31/2	EIA rack
Weight	kg	About 1,4	IIIL
Cooling		Convection cooling	
Acoustic noise	dBA	0	
AUDIO INPUTS			
L&R (from 1 to 6)		Connector	XLR female Balanced
Lan (IIIIII I to 0)		Impedance	110 Ω
OUTPUTS			
AES/EBU (from 1 to 6) & Reserve		Connector	XLR male Balanced
ALS/LDG (ITOIII I to 0) & Neserve		Load	110 Ω
INTERFACES			
Signalling LED		Power	1 Green
organism and a second		Position	6 Yellow
COMMAND		IN	DB25 Female (AUD6/1 interface)
CUTITIAND		OUT	DB25 Male (RDS6/1 interface)

# RDS6/1

Parameters         Value         Notes           GENERALS         -10 °C to + 50 °C / 95%         Relative humidity non condensing           MECHANICAL DIMENSIONS           Phisical dimensions         L x H x W         mm / inch mm /	
Ambient working temperature         -10 °C to + 50 °C / 95%         Relative humidity non condensing           MECHANICAL DIMENSIONS         mm / inch         483         EIA rack           Phisical dimensions         L x H x W         mm / inch         88 / 3 1/2         1HE	
MECHANICAL DIMENSIONS           Phisical dimensions         L x H x W         mm / inch	
Phisical dimensions         L x H x W         mm / inch	
Phisical dimensions L x H x W mm / inch 88 / 31/2 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 interfac	e)





# **RDS & AUDIO EQUIPMENTS**

**AUD - RDS** 

**MODELS** 

# AUD2P1 AUD2MP1 TRDS4002LUXOR-D







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.

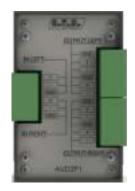
ORDERING INFORMATION	
Model	Description
AUD2P1	The audio splitter system allows you to split the audio signal in input and redistribute it on multiple outputs.
AUD2MP1	The audio splitter system allows you to split the audio signal in input and redistribute it on multiple outputs.
OPTION	
AUD2MP1/V1	2-Way 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.





# **AUD-RDS**



### AUD2P1

Accessory - Audio Distributor System.





# AUD2MP1

Accessory - Audio Distributor System.





R.V.R. Elettronica S.r.l. Via del Fonditore, 2/2c 40138 Bologna Italy TRDS-4002-LUXOR-D

RDS.









# **AUD-RDS**

### AUD2P1

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

### AUD2MP1

AUDZMF1			Wil	W .
Parameters			Value	Notes
GENERALS			5 10 1 50	
Operating temperature		O°C	From -10 to +50	
Operating humidity		%	95% non condensing	
MECHANICAL DIMENSION	NS			
Dhisiaal diasaasiaas	L II W	mm / inch	483 / 19	EIA rack
Phisical dimensions	LxHxW	mm / inch	44 / 31/2	1HE
Weight		kg	About 2	
AUDIO INPUTS				·
	Connector		XLR (female)	
Laft O Diabt	Impedance	Ohm	600 (10k on request)	Balanced
Left & Right	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)	
AE3/EDU	Impedance	Ohm	110	Balanced
OUTPUTS				
	Connector		2 x XLR (male)	
Left & Right	Impedance	Ohm	600 (10k on request)	Balanced
Leit & Rigiit	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	
	Connector		2 x XLR (male)	
AES/EBU	Impedance	Ohm	110	Balanced
	Insert loss	dB	6	





# **AUD-RDS**

### 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		
	EN50067		PTY, PTYN, TA, TP, MS, DI, PI, PS, AF, P	IN, EON, RT, TDC, IMC, EWS, IH, CT	
	Command formats		UECP - SPB490 Ver.6.1 / 2003		
RDS function	Frequency		57 kHz ± 1,5 Hz	(Internal/external reference)	
KD3 IUIICUUII	57 kHz carrier attenuation	dB	Ø 75		
	Phase 57 kHz		Adjustable up to 360° in 0,33° increm	ents	
	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	LxHxW	mm / inch		EIA rack	
	LAHAW	mm / inch	44 / 3 1/2	1HE	
Weight		kg	About 3,5		
AUDIO INPUTS					
	Connector	I. O	BNC	Unbalanced (female)	
MPX	Impedance	kΩ	10		
	Input level		Gain OdB / Max. +20 dBu		
BU 07	Connector	1.0	BNC	Unbalanced (female)	
PILOT	Impedance	kΩ	10	(O: 11 TTI)	
	Input level		Gain OdB / Max. +20 dBu	(Sinusoid. or TTL)	
OUTPUTS	Connector		DNO	Habelaneed (female)	
1&2	Connector	0	BNC	Unbalanced (female)	
ΙαΖ	Impedance		50	AP 111 1 0	
CONNECTORS	Output level	dBu	+20	Adjustable via software	
CONNECTORS	Connector		3x DB9 (female)		
RS232 Serial port	Connection rate		From 1200 to 115200 baud 8, N, 1		
Domete Innut	Connector				
Remote Input			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		





# **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

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.





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

### **GPSRXNV-02**

External GPS Receiver (PTX CONFIG.)





# **GPSRXNV**

### GPSRXNV-00

Parameters GENERALS		U.M.	Value	Notes
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	S			
C.A. power supply			c.100-120-230-250 VAC , 50-60 Hz	
C.C. power supply		VDC	+12	Monophase
MECHANICAL DIMENSION				
Phisical dimensions	Front panel width	mm / inch	483 / 19	EIA rack
r ilisicat ulilielisiolis	Front panel height	mm / inch	44 / 3 / 1 / 2	1HE
Weight	Weight		About 4	
AUDIO INPUTS				
Connector			BNC	
Accuracy to UTC, with	GPS locked		$\pm$ 50 ns (1 $\sigma$ )	
GPS system			Integrated	
OUTPUTS				
Connector			N-type 5V output for antenna power supply	
Typical level			ΠL	
10MHz output frequenc	y 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	S			
C.A. power supply			c.100-120-230-250 VAC , 50-60 Hz	
C.C. power supply		VDC	+12	Monophase
MECHANICAL DIMENSI				
Phisical dimensions	Front panel width	mm / inch	483 / 19	EIA rack
r ilisicat ullilelisiolis	Front panel height	mm / inch	44 / 3 / 1 / 2	1HE
Weight		kg	About 4	
AUDIO INPUTS				
Connector			BNC	
Accuracy to UTC, with	GPS locked		$\pm$ 50 ns (1 $\sigma$ )	
GPS system			Integrated	
OUTPUTS				
Connector			N-type 5V output for antenna power supply	
Typical level			TTL	
10MHz output frequenc	cy 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**

### GPSRXNV-02

Parameters		U.M.	Value	Notes
GENERALS		U.I™.	value	Notes
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 DIMENSIO	INS			
Phisical dimensions	Front panel width	mm / inch	483 / 19	EIA rack
FIIISICAL UIIIIEIISIOIIS	Front panel height	mm / inch	44 / 3 / 1 / 2	1HE
Weight			About 4	
AUDIO INPUTS				
Connector			BNC	
Accuracy to UTC, with G	GPS locked		$\pm$ 50 ns (1 $\sigma$ )	
GPS system			Integrated	
OUTPUTS				
Connector			N-type 5V output for antenna power supply	
Typical level			TTL	
10MHz output frequency	y 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





# **DUMMY LOADS**

**EDL-FM** 

**MODELS** 

EDL1000-FM EDL3500-FM EDL5000-FM EDL6000-FM EDL15000-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	<b>5kW</b> Dummy Load. Forced Air Cooled.
EDL6000-FM	<b>6kW</b> Dummy Load. Forced Air Cooled.
EDL15000-FM	<b>15.000W</b> Dummy Load. Forced Air Cooled.



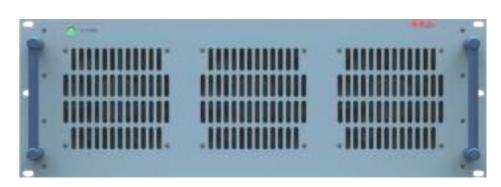
### **EDL-FM**



### EDL1000-FM

1kW Dummy Load. Forced Air Cooled.

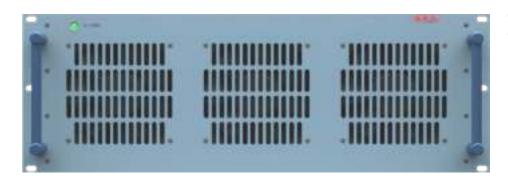




### EDL3500-FM

3.5kW Dummy Load. Forced Air Cooled

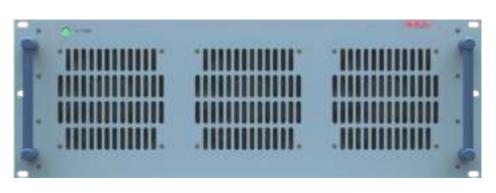




### EDL5000-FM

5kW Dummy Load. Forced Air Cooled.





R.V.R. Elettronica S.r.l.

Via del Fonditore, 2/2c

40138 Bologna Italy

### EDL6000-FM

6kW Dummy Load. Forced Air Cooled.









# **EDL-FM**

# EDL1000-FM

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

101

### EDL3500-FM

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





### EDL5000-FM

Parameters		U.M.	Value	Notes			
GENERALS		0.11.		11000			
Max power rating			5000				
Frequency range		MHz	DC ÷ 108 Mhz				
Return loss		dB	>27				
POWER REQUIREMENTS	S						
AC Dawer innut	AC Supply Voltage		230 VAC ±15% single-phase				
AC Power input	Connector		VDE				
MECHANICAL DIMENSIONS							
Phisical dimensions	L x H x W	mm / inch	483 / 19	EIA rack			
PHISICAL UIIIIEHSIUHS	LAHAW	mm / inch	177 / 7 4HE				
Weight		kg	About 20				
Cooling			Automatically forced air-cooled				
AUDIO INPUTS							
RF Input	Impedance	Ohm	50				
Ki input	Connector		7/8"				
FUSES							
On blowers							

## EDL6000-FM

	U.M.	Value	Notes			
	_	6000				
Frequency range		DC ÷ 108 Mhz				
	dB	>27				
3						
AC Supply Voltage		230 VAC ±15% single-phase				
Connector		VDE				
MECHANICAL DIMENSIONS						
I v H v W	mm / inch	483 / 19	EIA rack			
LAIIAW	mm / inch	177 / 7 4HE				
	kg	About 20				
		Automatically forced air-cooled				
Cooling Automatically forced air-cooled  AUDIO INPUTS						
Impedance	0hm	50				
Connector	T	7/8"				
	AC Supply Voltage Connector INS L x H x W Impedance	AC Supply Voltage Connector  INS  L x H x W				





# **TELEMETRY SYSTEM**

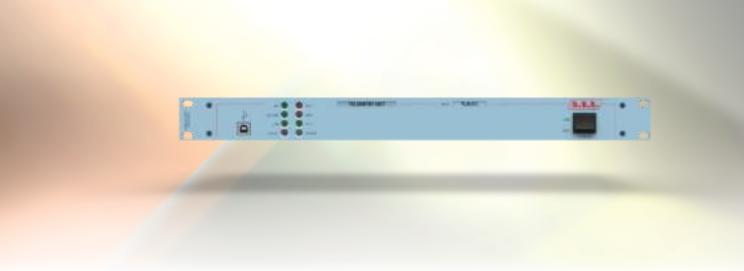
TLK - /TLW-E

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 TLK302T TLK301 /TLW-E



R.V.R. Elettronica S.r.l.

Via del Fonditore, 2/2c

40138 Bologna Italy

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	BLUESSONV BLUESSONV
/TLW-TEX-E	TEX30LCD/S TEX50LCD/S TEX100LCD/S TEX150LCD/S TEX300LCD TEX502LCD TEX300LCD TEX3500LCD
/TLW-TFT-E	TEX32TFT TEX52TFT TEX302LCD/S TEX502TFT TEX702TFT TEX1002TFT TEX1003TFT TEX1703TFT TEX2003TFT TEX2503TFT TEX5004TFT







TLK300

Telemetry System.







40138 Bologna Italy

TLK301

Telemetry System.







Telemetry System.





/TLW-E

Telemetry System.





Phone +39 0516010506

sales@rvr.it - www.rvr.it

Fax +39 0516011104

### TLK300

Parameters			Value	Notes
GENERALS				
Ambient working temperature			-10 °C to + 50 °C / 95%	Relative humidity non condensing
POWER REQUIREMENTS				
	AC Supply Voltage	VAC	80 - 260	Full Range Monophase
AC Power input	AC Apparent Power Consumption	W	25	
	Connector		VDE IEC Standard	
DC Power Input	DC Supply Voltage	VDC	12	
DC Power Iliput	DC Current		< 3 a	
MECHANICAL DIMENSIONS				
Phisical dimensions	LxHxW	mm / inch		EIA rack
	LXIIXVV	mm / inch		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)
12C			Yes	(0.1
	LAN		Yes Yes	(Only on WEB versions)
RJ45	10/100 base-T Ethernet LAN		100	ssible from any internet browser on a PC or smartphone
	HTTP and AJAX			nails (up to 4 independent address can be defined)
CIM -I-+ O ANTENNA	SMTP		Yes	[Only on GSM versions]
SIM slot & ANTENNA			162	נטוונץ טוו טטייו עפוצוטווצן
FUSES On mains			1 Futamal from F 1 A F EVOD	
On services			1 External fuse F 1 A F - 5X20 mm X	
			Х	
On PA Supply			Х	
On driver supply			Ι Χ	<u> </u>

# TLK301

TLK3U1				
Parameters			Value	Notes
GENERALS				
Ambient working temperature °C		)°C	-10 to + 5	Whithout condensing
POWER REQUIREMENTS				
	AC Supply Voltage	VAC	80 ÷ 260 *	Full Range ** Internal switch *
AC Power input	AC Apparent Power Consumption	W	25	
	Connector		VDE IEC Standard	
DC Power Input	DC Supply Voltage	VDC	12	
DC Fower Illput	DC Current		< 3	
FUSES				
On mains			1 External fuse F 1 A F ÷ 5X20 mm	
MECHANICAL DIMENSIONS				
	Front panel width	mm / inch	483	EIA rack
Phisical dimensions	Front panel height	mm / inch	44	1HE
PHISICAL UIIIIEHSIOHS	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	(O. L. TV DUIG IN OA )
RS485 I2C	PLUG-IN Protocol		Yes	(Only on TX PLUG-IN CA versions)
RJ45	LAN		Yes	(Only on WEB versions)
SIM slot & ANTENNA	LAIN		Yes Yes	(Only on GSM versions)
1		162	(Ulity uli usiri versiulis)	
VARIOUS Cooling			Convection cooling	
Acoustic noise		dBA	()	
710000110 110100		4571	· ·	<u> </u>





# TLK302T

Parameters			Value	Notes	
GENERALS					
Ambient working temperature			-10 °C to + 50 °C / 95%	Relative humidity non condensing	
<b>POWER REQUIREM</b>	IENTS				
	AC Supply Voltage	VAC	100 - 240	Full Range Monophase	
AC Power input	AC Apparent Power Consumption	W	15		
	Connector		VDE IEC Standard		
MECHANICAL DIME	ENSIONS				
Phisical dimension		mm / inch	483	EIA rack	
	IS LXTIX VV	mm / inch	88 / 31/2	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)	
l'C	For sampling the RVR station single and dual exciter		Yes Yes		
	10/100 base-T Ethernet LAN HTTP		100	71.6	
RJ45	SNMPV 2.0		Status and configuration can be accessible from any internet browser on a PC or smartphone.  Status and configuration can be accessible from MIB browser and TRAP alarm receiver.		
	SMTP		Marm notification events condevia or	nails (up to 2 independent address can be defined).	
	SMTP		Built-in dock synchronization over net		
FUSES	אוויוכ		Daire-in anck Shirmonizarion and ther	wurna.	
On mains			1 External func E 2 1E A T EV20 mm		
On services			1 External fuse F 3,15 A T - 5X20 mm		
On PA Supply			Х		
On driver supply			Х		
on univer supply			Λ		

# /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,)	Х	
WEB protection with 2 Password Levels	X	
SNMP connection (GET,SET)	Х	
TRAP notification with Station name	Х	
TRAP notification with Counter	Х	















Revision 04/24

www.rvr.it