

exciters



BLUES 30 NV

Mono/Stereo/MPX

FM Exciter

87.5 - 108 MHz

Features/Caratteristiche

All of RVR's Experience in this new ultracompact FM Exciter!

Broadcast quality, **reliable and at a value price, extremely compact**, ideal for STL stations and multi-channel applications via cable.

State-of-the-art audio quality for perfect reproduction, fully compliant with **FCC, CCIR** and all international regulations.

Microprocessor-controlled, easy to programme from the menu or via RS232, all main parameters can be read on the LCD display.

Integrated high performance stereo coder, L&R inputs, MPX and auxiliaries for SCA / RDS signals.

Output adjustable between 0 and 30 W automatic APC control and Foldback protection, **safe operation** under all operating conditions.

Made using SMD technology, **fully solid state**, MOSFET RF amplifiers.

Ultracompact, non-deformable and light, **1HE rack unit**, stainless steel chassis, only kg 6.

Maximum operating reliability and stability designed to **minimise spare parts**.

Tutta l'esperienza RVR nel nuovo eccitatore FM ultracompatto!

Qualità broadcast, affidabile ed economico, estremamente compatto, ideale per stazioni ripetitrici ed applicazioni multicanale via cavo.

Qualità audio allo stato dell'arte per una perfetta riproduzione, pienamente rispondente ad FCC, CCIR ed a tutte le normative internazionali.

Controllato da microprocessore, facilmente programmabile da menu' o via RS232, lettura su display LCD di tutti i parametri principali.

Stereo coder integrato ad elevate prestazioni, ingressi L&R, MPX ed ausiliari per segnali SCA / RDS.

Potenza di uscita regolabile da 0 a 30 Watt controllo automatico APC e protezione Foldback, funzionamento sicuro in ogni condizione di esercizio.

Costruito in tecnologia SMD, completamente allo stato solido, amplificatori RF a MOSFET.

Extracompacto, indeformabile e leggero, 1 unità' rack, chassis in inox, solo kg 6.

Massima affidabilità e stabilità di funzionamento progettato per minimizzare le parti di ricambio.



Technical specifications BLUES 30 NV

Parameters	Conditions	U.M.	Value
GENERALS			
Frequency range		MHz	87.5 ÷ 108 MHz in 10 kHz steps (OIRT and JPN on request)
Rated output power		W	30 (continuously variable by software from 0 to maximum)
Frequency stability	WT from -10°C to 50°C	ppm	±1
Modulation type			Direct carrier frequency modulation
Operational Mode			Mono, Stereo, Multiplex
AC Supply Voltage	Mains input voltage range	VAC	110÷230 +10/-15% (full range, internal switch)
Power Consumption		VA / W	120 / 70
Display			Alphanumerical LCD - 2 x 16
Physical Dimensions	Front panel width	mm (")	483 (19")
	Front panel height	HE	1
	Overall depth	mm (")	394 (15,5")
Weight		kg	6
Ambient working temperature		°C	-10 to + 50
Modulation capability		kHz	150 Stereo, 180 Mono/MPX
Pre-emphasis mode		mS	0, 50 (CCIR), 75 (FCC)
Spurious & harmonic suppression		dBc	<75 (80 typical)
Asynchronous AM S/N ratio	Referred to 100% AM, with no de-emphasis	dB	≥ 65 (typical 70)
Synchronous AM S/N ratio	Referred to 100% AM, FM deviation 75 kHz by 400Hz sine, without de-emphasis	dB	≥ 50 (typical 60)
MONO OPERATION			
S/N FM Ratio	RMS @ ± 75 kHz peak, HPF 20Hz - LPF 23 kHz, 50 mS de-emphasis	dB	> 80 (typical 85)
	Qpk @ ± 75 kHz peak, CCIR weighted, 50 mS de-emphasis	dB	>73
	Qpk @ ± 40 kHz peak, CCIR weighted, 50 mS de-emphasis	dB	>68
Frequency Response	30Hz ÷ 15kHz	dB	better than ± 0.5 dB (typical ± 0.2)
Total Harmonic distortion	THD+N 30Hz ÷ 15kHz	%	< 0.1 (Typical 0.07%)
Intermodulation distortion	Measured with a 1 KHz and 1.3 KHz tones, 1:1ratio, at FM 75 kHz	%	< 0.02
MPX OPERATION			
Composite S/N FM Ratio	RMS @ ± 75 kHz peak, HPF 20Hz - no LPF, 50 mS de-emphasis	dB	> 80 (typical 85)
Frequency Response	30Hz ÷ 53kHz	dB	± 0.2
	53kHz ÷ 100kHz	dB	± 0.5
Total Harmonic Distortion	THD+N 30Hz ÷ 53kHz	%	< 0.1
	THD+N 53kHz ÷ 100kHz	%	< 0.15
Intermodulation distortion	Measured with a 1 KHz and 1.3 KHz tones, 1:1, modulation at FM 75 kHz	%	< 0.05
Stereo separation	30Hz ÷ 53kHz	dB	> 50 dB (typical 60)
STEREO OPERATION			
Stereo S/N FM Ratio	RMS @ ± 75 kHz peak, HPF 20Hz - LPF 23 kHz, 50 mS de-emphasis, L & R demodulated	dB	> 75 (78 typical)
	Qpk @ ± 75 kHz peak, CCIR weighted, 50 mS de-emphasis, L & R demodulated	dB	> 65 dB
	Qpk @ ± 40 kHz peak, CCIR weighted, 50 mS de-emphasis, L & R demodulated	dB	> 58 dB
Frequency Response	30Hz ÷ 15kHz	dB	± 0.5
Total Harmonic Distortion	THD+N 30Hz ÷ 15kHz	%	< 0.05
Intermodulation distortion	Measured with 1 KHz and 1.3 KHz tones, 1:1 ratio, modulation at FM 75 kHz	%	≤ 0.03
Stereo separation		dB	> 50 (typical 55)
Main / Sub Ratio	30Hz ÷ 15kHz	dB	> 40 (typical 45)
SCA OPERATION			
Frequency response	40kHz ÷ 100kHz	dB	± 0.5

These are general specifications. They show typical values and are subject to change without notice.

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Parameters	Conditions	U.M.	Value
AUDIO INPUTS			
Left & Right / MPX Balanced	Type		XLR Female, balanced or externally unbalanced
	Impedance	Ohm	10 k or 600 selectable on rear panel through dip-switches
	Input Level / Adjust	dBu	-13 to +13 continuously variable
MPX Unbalanced	Type		BNC unbalanced
	Impedance	Ohm	10 k or 50 selectable on rear panel through dip-switches
	Input Level / Adjust	dBu	-13 to +13 for 75 KHz FM, externally adjustable
RDS / SCA	Type		2 x BNC, unbalanced
	Impedance	Ohm	10 k
	Input Level / Adjust	dBu	- 3 to +13 for 7,5 KHz FM, externally adjustable
OUTPUTS			
RF Output	Impedance	Ohm	50 (N Female)
RF Monitor	Impedance	Ohm/Level	50 (BNC Female, approx. - 30 dB)
Pilot Output	for synchronisation of RDS Coder	Ohm/Level	>5 k Ohm / 1 Vpp
MPX Monitor	Output Level	dBu	0
AUXILIARY CONNECTIONS			
Interlock	Connector		BNC
RS232 and RS485 Serial Interface	Connector		DB9 F (*)
Remote & Telemetry Interface	Connector		DB15F
VARIOUS			
Cooling			Forced, with internal fan
Acoustic Noise		dBA	< 58
STANDARD COMPLIANCE			
Safety 7 Spectrum Optimization			EN60215 / ETS 300 447
EMC			EN 301 489-11 V1, 2, 1

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