



exciters

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Features/Caratteristiche

High performance exciters, compact, reliable and easy maintenance.

Broadcast quality at a value price, can be used as drivers for medium power FM stations or as **stand-alone applications.**

Compact, non-deformable and light, **2HE rack unit**, stainless steel chassis.

High performance integrated stereo coder, with L&R Mono and MPX inputs and 2 SCA / RDS signal inputs.

Continuously adjustable output power from 0 to maximum power with automatic APC control and Foldback protection.

Safe operation in any working conditions.

Completely **microprocessor-controlled** easy to program from the menu or via RS232, all **main parameters can be read on the LCD display.**

Possibility to be monitored through **all RVR telemetry systems** to guarantee simple remote control of the operating parameters.

Manufactured using SMD technology and composed of **only 4 modules.** Maximum operating reliability designed to allow an **easy maintenance.**

Universal multi-voltage power supply from 80 to 260 V with no pre-selection.

Modern technology that complies with all **EC, FCC and CCIR standards.**

Eccitatori ad alte prestazioni, compatti, affidabili e di semplice manutenzione.

Qualità di trasmissione senza compromessi ad un **prezzo competitivo utilizzabile come driver** per stazioni di media potenza **o applicazioni stand-alone.**

Compatti, indeformabili e leggeri, chassis in inox, in sole **2 unità rack.**

Stereo coder integrato ad elevate prestazioni, ingressi L&R, Mono ed MPX e 2 ingressi per segnali SCA / RDS.

Potenza di uscita regolabile con continuità da 0 alla potenza massima con controllo automatico APC e protezione Foldback. Funzionamento sicuro in ogni condizione di esercizio.

Completamente controllati da microprocessore, facilmente programmabile da menu o via RS232, **lettura su display LCD di tutti i parametri principali.**

Perfettamente **interfacciabili con tutti i sistemi di telemetria RVR** per un facile controllo remoto dei parametri di funzionamento.

Costruiti in tecnologia SMD e costituiti da **solli 4 moduli.** Elevata sicurezza di esercizio ed **estrema facilità di manutenzione.**

Alimentatore universale **multitensione da 80 a 260 V** senza necessita' di pre-selezione.

Tecnologia moderna pienamente rispondente alle norme **EC, FCC ed CCIR.**

TEX 30
TEX 50
TEX 100/150

Stereo/MPX

FM Exciters

87.5 - 108 MHz

(OIRT and JPN Band upon request)

BROADCAST
EQUIPMENT

exciters

Parameters	Conditions	U.M.
GENERALS		
Frequency range	From software, with 10 kHz steps(OIRT and JPN on request)	MHz
Rated output power	Continuously variable by software from 0 to maximum	W
Modulation type		
Operational Mode		
Ambient working temperature	Whithout condensing	°C
Frequency stability	WT from -10°C to 50°C	ppm
Modulation capability		kHz
Pre-emphasis mode	selectable by external jumpers	μS
Spurious & harmonic suppression		dBc
Asynchronous AM S/N ratio	Referred to 100% AM, with no de-emphasis	dB
Synchronous AM S/N ratio	Referred to 100% AM, FM deviation 75 kHz by 400Hz sine, without de-emphasis	dB
MONO OPERATION		
S/N FM Ratio	RMS @ ± 75 kHz peak, HPF 20Hz - LPF 23 kHz, 50 μS de-emphasis	dB
	Qpk @ ± 75 kHz peak, CCIR weighted, 50 μS de-emphasis	dB
	Qpk @ ± 40 kHz peak, CCIR weighted, 50 μS de-emphasis	dB
Frequency Response	30Hz ÷ 15kHz	dB
Total Harmonic Distortion	THD+N 30Hz ÷ 15kHz	%
Intermodulation distortion	Measured with a 1 KHz and 1.3 KHz tones, 1:1ratio, at FM 75 kHz	%
Transient intermodulation distortion	Measured with a 3.18 kHz square wave and a 15 kHz sine wave at 75 kHz FM	%
MPX OPERATION		
Composite S/N FM Ratio	RMS @ ± 75 kHz peak, HPF 20Hz - no LPF, 50 μS de-emphasis	dB
Frequency Response	30Hz ÷ 53kHz / 53kHz ÷ 100kHz	dB
Total Harmonic Distortion	THD+N 30Hz ÷ 53kHz / THD+N 53kHz ÷ 100kHz	%
Intermodulation distortion	Measured with a 1 KHz and 1.3 KHz tones, 1:1, modulation at FM 75 kHz	%
Transient intermodulation distortion	Measured with a 3.18 kHz square wave and a 15 kHz sine wave at 75 kHz FM	%
Stereo separation	30Hz ÷ 53kHz	dB
STEREO OPERATION		
Stereo S/N FM Ratio	RMS @ ± 75 kHz peak, HPF 20Hz - LPF 23 kHz, 50 μS de-emphasis, L & R demodulated	dB
	Qpk @ ± 75 kHz peak, CCIR weighted, 50 μS de-emphasis, L & R demodulated	dB
	Qpk @ ± 40 kHz peak, CCIR weighted, 50 μS de-emphasis, L & R demodulated	dB
Frequency Response	30Hz ÷ 15kHz	dB
Total Harmonic Distortion	THD+N 30Hz ÷ 15kHz	%
Intermodulation distortion	Measured with 1 KHz and 1.3 KHz tones, 1:1 ratio, modulation at FM 75 kHz	%
Transient intermodulation distortion	Measured with a 3.18 kHz square wave and a 15 kHz sine wave at 75 kHz FM	%
Stereo separation		dB
SCA OPERATION		
Frequency response	40kHz ÷ 100kHz	dB
AUDIO INPUTS		
Left / MPX balanced	XLR Female	
	Impedance / level adjust	0hm / dBu
Right	XLR Female	
	Impedance / level adjust	0hm / dBu
MPX unbalanced	BNC Female	
	Impedance / level adjust	0hm / dBu
SCA and RDS	BNC Female	
	Impedance / level adjust	0hm / dBu
OUTPUTS		
RF output	N Female / Impedance	0hm
RF monitor	BNC Female / Output Level referred to the RF output	dB
Pilot output	BNC Female / Impedance / output level	0hm / Vpp
MPX output	BNC Female / Output Level	dBu
AUXILIARY CONNECTIONS		
Type		

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

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Technical specifications TEX

TEX 30 Value	TEX 50 Value	TEX 100/150 Value
87.5 ÷ 108	87.5 ÷ 108	87.5 ÷ 108
30	50	100 / 150
Direct carrier frequency modulation	Direct carrier frequency modulation	Direct carrier frequency modulation
Mono, Stereo, Multiplex	Mono, Stereo, Multiplex	Mono, Stereo, Multiplex
-10 to + 50	-10 to + 50	-10 to + 50
±1	±1	±1
150 Stereo, 180 Mono/MPX	150 Stereo, 180 Mono/MPX	150 Stereo, 180 Mono/MPX
0, 50 (CCIR), 75 (FCC)	0, 50 (CCIR), 75 (FCC)	0, 50 (CCIR), 75 (FCC)
<75 (80 typical)	<75 (80 typical)	<75 (80 typical)
≥ 65 (typical 70)	≥ 65 (typical 70)	≥ 65 (typical 70)
≥ 50 (typical 60)	≥ 50 (typical 60)	≥ 50 (typical 60)
> 80 (typical 85)	> 80 (typical 85)	> 80 (typical 85)
>73	>73	>73
>68	>68	>68
better than ± 0.5 dB (typical ± 0.2)	better than ± 0.5 dB (typical ± 0.2)	better than ± 0.5 dB (typical ± 0.2)
< 0.1 (Typical 0.07%)	< 0.1 (Typical 0.07%)	< 0.1 (Typical 0.07%)
< 0.02	< 0.02	< 0.02
< 0.1 (typical 0.05)	< 0.1 (typical 0.05)	< 0.1 (typical 0.05)
> 80 (typical 85)	> 80 (typical 85)	> 80 (typical 85)
± 0.2 / ± 0.5	± 0.2 / ± 0.5	± 0.2 / ± 0.5
< 0.1 / < 0.15	< 0.1 / < 0.15	< 0.1 / < 0.15
< 0.05	< 0.05	< 0.05
< 0.1 (typical 0.05)	< 0.1 (typical 0.05)	< 0.1 (typical 0.05)
> 50 dB (typical 60)	> 50 dB (typical 60)	> 50 dB (typical 60)
> 75 (78 typical)	> 75 (78 typical)	> 75 (78 typical)
> 65 dB	> 65 dB	> 65 dB
> 58 dB	> 58 dB	> 58 dB
± 0.5	± 0.5	± 0.5
< 0.05	< 0.05	< 0.05
≤ 0.03	≤ 0.03	≤ 0.03
< 0.1 (typical 0.05)	< 0.1 (typical 0.05)	< 0.1 (typical 0.05)
> 50 (typical 55)	> 50 (typical 55)	> 50 (typical 55)
± 0.5	± 0.5	± 0.5
balanced or externally unbalanced	balanced or externally unbalanced	balanced or externally unbalanced
10 k or 600 / - 13 to +13	10 k or 600 / -13 to +13	10 k or 600 / -13 to +13
balanced or externally unbalanced	balanced or externally unbalanced	balanced or externally unbalanced
10 k or 600 / - 13 to +13	10 k or 600 / -13 to +13	10 k or 600 / -13 to +13
unbalanced	unbalanced	unbalanced
10 k or 50 / -3 to +13	10 k or 50 / -3 to +13	10 k or 50 / -3 to +13
unbalanced	unbalanced	unbalanced
10 k / -3 to +13	10 k / -3 to +13	10 k / -3 to +13
50	50	50
approx. -30	approx. -30	approx. -60
>5 k / 1	>5 k / 1	>5 k / 1
0	0	0
Interlock / Ext ref. 10 MHz / RS232 / RS485 Serial Interface / Service / Modem / I2C / Remote and Telemetry interface	Interlock / Ext ref. 10 MHz / RS232 / RS485 Serial Interface / Service / Modem / I2C / Remote and Telemetry interface	Interlock / Ext ref. 10 MHz / RS232 / RS485 Serial Interface / Service / Modem / I2C / Remote and Telemetry interface

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<i>Parameters</i>	<i>Conditions</i>	<i>U.M.</i>
POWER REQUIREMENTS		
AC Power Input	AC Supply Voltage (*) Full range (**) Internal switch	VAC
	AC Apparent and Active Power Consumption	VA / W
	Power Factor	
DC Power Input	DC Supply Voltage / Current	VDC / ADC
MECHANICAL DIMENSIONS		
Physical Dimensions	Front panel width	mm (")
	Front panel height	mm (")
	Overall depth	mm (")
Weight		kg
OPTIONS		
Input 10 MHz		code
VARIOUS		
Cooling		
Acoustic Noise		dBA
STANDARD COMPLIANCE		
Safety		
EMC		
Spectrum Optimization		

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Technical specifications TEX

TEX 30 Value	TEX 50 Value	TEX 100/150 Value
80 ÷ 260 (*)	80 ÷ 260 (*)	115 / 230 ±15% (**)
130 / 70	200 / 100	440 / 260
0,5	0,5	0,6
24 / 3.5 (*)	24 / 4.5 (*)	28 / 8,2 (**)
483 (19")	483 (19")	483 (19")
88 (3 1/2") 2HE	88 (3 1/2") 2HE	88 (3 1/2") 2HE
400 (15,7")	400 (15,7")	400 (15,7")
6,7	8,5	8,5
/10MHz	/10MHz	/10MHz
Forced, with internal fan	Forced, with internal fan	Forced, with internal fan
< 58	< 58	< 58
EN60215:1989	EN60215:1989	EN60215:1989
EN 301 489-11 V1, 2, 1	EN 301 489-11 V1, 2, 1	EN 301 489-11 V1, 2, 1
ETS 300 447	ETS 300 447	ETS 300 447

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