

## EM 30 DDS FM MODULATOR

The new **OMB EM 30 DDS FM MODULATOR** (Digital Audio Transmitter) has been created by the OMB centre of development to meet the strictest demands of Broadcasters by offering high audio quality at a very low price.



### MAIN ADVANTAGES

- Great audio quality due to its low distortion, up to 70dB stereo separation and 90dB signal/noise ratio.
- It can be used as an independent exciter, with power output from 0 to 100%.
- DSP board for isofrequency applications (SFN) and audio limiter (ITU) to control totally digital emissions in the spectrum and free from mechanical disturbances.
- Audio rescuer integrated, with programmable established time and all inputs priority (analog, digital and MPX).
- Microprocessor controlled interface and totally programmed by LCD and optical encoder.
- High performance stereo coder included, L and R analog audio inputs, mono inputs, MPX composite signal and auxiliary inputs for SCA/RDS signals. Includes S/PDIF, TOSLINK and AES/EBU digital standard inputs.
- Remote control and telemetry system via WEB or SNMP (optional).
- Fold back for correct protection of VSRW (*Voltage Standing Wave Ratio*), plus IAMLC (*Intelligent Automatic Modulation Level Control*) to maintain a steady modulation.
- RDS coder included, with standard UECP functions.

### GENERAL CHARACTERISTICS

EXCITER EM DDS PLUS 30	
RF FEATURES	
FREQUENCY RANGE	87.5-108MHz
OUTPUT POWER	30W
MODULATION TYPE	Direct Carrier Frequency
OPERATIONAL MODE	Mono, Stereo, Multiplex
ENVIRONMENTAL WORKING CONDITIONS	-10°C a +50°C / 95% relative humidity
FREQUENCY PROGRAMMABILITY	From software with 1, 10, 100, 1000 kHz steps

<b>FREQUENCY STABILITY</b>	± 1 ppm
<b>MODULATION CAPABILITY</b>	150kHz
<b>PRE-EMPHASIS MODE</b>	0µS, 50µS (CCIR), 75µS (FCC)
<b>AC POWER INPUT</b>	115 / 230 ±15% VAC
<b>DIMMENSIONS</b>	483 mm x 88 mm x 400 mm
<b>WEIGHT</b>	10 KGS
<b>COOLING</b>	Forced, with internal FAM
<b>ACUSTIC NOISE</b>	< 56 dBA
<b>AUDIO INPUTS</b>	
<b>LEFT &amp; RIGHT</b>	10kOhm o 600Ohm (XLR F) Level: -12,5 a +12,5 dBu
<b>MPX UNBALANCED</b>	10kOhm (BNC) Level: -12,5 a +12,5 dBu
<b>SCA/RDS</b>	10kOhm (2 x BNC) Nivel: -30 a +13dBu
<b>AES/EBU</b>	110Ohm (XLR F)
<b>TOSLINK</b>	TOSLINK F05 - EIAJ
<b>OUTPUTS</b>	
<b>CONNECTOR</b>	500hm (Type N)
<b>RF MONITOR</b>	500hm (Type BNC) -30dBc
<b>PILOT OUTPUT</b>	Level: -12.5 a + 5 dBu (0.1 dB step variable by software. or: -6.5 a +11 dBu (internally adjustable +6dBu by jumper) or: -0.5 a 17 dBu (internal jumper to increase the output level of + 12dBu)
<b>MPX MONITOR</b>	>600Ohm (BNC) Level: -12.5 a + 5 dBu (0.1 dB step variable by software. or: -6.5 a +11 dBu (internally adjustable +6dBu by jumper) or: -0.5 a 17 dBu (internal jumper to increase the output level of + 12dBu)

**OPTIONAL**

<b>SUPPORTS SFN APPLICATIONS</b>
<b>TELEMETRY VIA PARALLEL INTERFACE</b>
<b>DIGITAL TELEMETRY VIA SCM6 INTERFACE</b>
<b>EXTERNAL 10MHz INPUT</b>
<b>SERIAL EXTENSION CARD FOR RDS</b>
<b>WEB TELEMETRY EXTENSION CARD</b>

*\* The images and/or technical specifications are subject to change without previous notice.*

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