

### HIGH EFFICIENCY 500W FM TRANSMITTER EM 500 HE DIG PLUS COMPACT

The 500W FM transmitter EM 500 HE DIG PLUS COMPACT has been created by the OMB center of development for high efficiency transmitters. Its flexibility, quality, compactness, together with its low electrical consumption make the EM 500 HE DIG PLUS COMPACT one of the best offered on the market today. This transmitter can be supplied with the following options:

- Stereo generator
- RDS
- Web server/SNMP telemetry
- AES/EBU digital audio input



#### MAIN ADVANTAGES

- Typical AC efficiency >73% and typical RF efficiency of 82%.
- An amplifying module of 600W with robust LDMOS transistor of the latest technology.
- Memory recording of events.
- Speed control of cooling fans according to temperature of power modules so as to optimize consumption and to decrease acoustic contamination.
- Advanced protection against load mismatches without transmission cuts and fast protection in case of excessive reflected power and/or excessive input power.
- Analog telemetry, digital remote control and telemetry RS232, remote control by opened/closed contacts.
- Low pass filter, Mains EMI filter and internal single-phase transient suppressor.
- Automatic power reduction at night.
- Automatic power reduction in case of high temperature, the equipment returns automatically to its rated power value when the temperature reaches back an average value.
- Automatic power reduction in case of excessive reflected power.
- Automatic voltage control for efficiency optimization.

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world



#### **GENERAL CHARACTERISTICS**

FREQUENCY RANGE	87.5-108MHz
FM MODULATION	75KHz (adjustable) peak deviation. Mono
	180kF3E and Stereo 256kF3E
AUDIO/MPX INPUT LEVEL	-3.5 to +12.5dBm @ 75KHz deviation
AUDIO INPUT CONNECTORS	XLR(F)
AUX. CHANNEL INPUT LEVEL (RDS/SCA)	7.5KHz deviation: -12.5 to 3.5dBm
	2KHz deviation: -24 to -8dBm
AUX. CHANNEL INPUT IMPEDANCE	10KOhm
MODULATION DISTORTION	7.5KHz deviation: <0.05%, 0.02% typical
	2KHz deviation: <0.2%, 0.05% typical
MONO S/N RATIO	30 to 20000Hz: >76dB, 86dB typical
	CCIR: >75dB, 81dB typical
STEREO S/N RATIO	30 to 20000Hz: >72dB, 77dB typical
	CCIR: >68dB, 72dB typical
AUDIO CHANNELS BANDWIDTH	30 to 15000Hz ±0.1dB
PRE-EMPHASIS TIME CONSTANT	Selectable, 0/50/75 microseconds
NOMINAL RF OUTPUT POWER	500W
CONSUMPTION	~750VA at 500W output power
TOTAL AC EFFICIENCY	>73% typical
RF EFFICIENCY	82% typical
TRANSMITTER TUNING STEPS	10/100KHz
OUTPUT POWER ALC STABILITY	±3%
HARMONICS AND SPURIOUS EMISSIONS	<80dBc
RF OUTPUT IMPEDANCE	50Ω
RF OUTPUT CONNECTOR	N type, 7/16"(F) optional
RF SAMPLER CONNECTOR	BNC type
POWER SUPPLY	90-264Vac ±10% 47/63Hz
OPERATING TEMPERATURE RANGE	0 to 40°C recommended, -10 to +55°C max.
RELATIVE HUMIDITY	Up to 95% not condensed
DIMENSIONS	2 standard rack units of 19"
WEIGHT	11Kg

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