HIGH EFFICIENCY 500W FM TRANSMITTER
EM 500 HE CMT

The 500W FM transmitter **EM 500 HE CMT** 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 CMT** 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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GENERAL CHARACTERISTICS

FREQUENCY RANGE	87.5-108MHz
FM MODULATION	75KHz (adjustable) peak deviation Mono 180kF3E and Stereo 256kF8E 302K F8E sub-carrier included
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	100-264Vac, 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

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

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