

## 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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## GENERAL CHARACTERISTICS

<b>FREQUENCY RANGE</b>	87.5-108MHz
<b>FM MODULATION</b>	75KHz (adjustable) peak deviation Mono 180kF3E and Stereo 256kF8E 302K F8E sub-carrier included
<b>AUDIO/MPX INPUT LEVEL</b>	-3.5 to +12.5dBm @ 75KHz deviation
<b>AUDIO INPUT CONNECTORS</b>	XLR(F)
<b>AUX. CHANNEL INPUT LEVEL (RDS/SCA)</b>	7.5KHz deviation: -12.5 to 3.5dBm 2KHz deviation: -24 to -8dBm
<b>AUX. CHANNEL INPUT IMPEDANCE</b>	10KOhm
<b>MODULATION DISTORTION</b>	7.5KHz deviation: <0.05%, 0.02% typical 2KHz deviation: <0.2%, 0.05% typical
<b>MONO S/N RATIO</b>	30 to 20000Hz: >76dB, 86dB typical CCIR: >75dB, 81dB typical
<b>STEREO S/N RATIO</b>	30 to 20000Hz: >72dB, 77dB typical CCIR: >68dB, 72dB typical
<b>AUDIO CHANNELS BANDWIDTH</b>	30 to 15000Hz $\pm$ 0.1dB
<b>PRE-EMPHASIS TIME CONSTANT</b>	Selectable, 0/50/75 microseconds
<b>NOMINAL RF OUTPUT POWER</b>	500W
<b>CONSUMPTION</b>	~750VA at 500W output power
<b>TOTAL AC EFFICIENCY</b>	>73% typical
<b>RF EFFICIENCY</b>	82% typical
<b>TRANSMITTER TUNING STEPS</b>	10/100KHz
<b>OUTPUT POWER ALC STABILITY</b>	$\pm$ 3%
<b>HARMONICS AND SPURIOUS EMISSIONS</b>	<80dBc
<b>RF OUTPUT IMPEDANCE</b>	50 $\Omega$
<b>RF OUTPUT CONNECTOR</b>	N type, 7/16"(F) optional
<b>RF SAMPLER CONNECTOR</b>	BNC type
<b>POWER SUPPLY</b>	100-264Vac, 47/63Hz
<b>OPERATING TEMPERATURE RANGE</b>	0 to 40°C recommended, -10 to +55°C max.
<b>RELATIVE HUMIDITY</b>	Up to 95% not condensed
<b>DIMENSIONS</b>	2 standard rack units of 19"
<b>WEIGHT</b>	11Kg

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

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