

SOLID STATE 100W FM TRANSMITTER EM 100 DIG PLUS



The **EM 100 DIG PLUS** is a 100W FM transmitter made up with the most modern available technology so as to provide the maximum performance at minimal cost, while fully meeting the technical regulations. Flexibility, quality, compactness, and low electrical consumption make the EM 100 DIG PLUS 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

- Super-compact size and reduced weight.
- Low performance costs.
- Robust modular construction.
- Easy to use and to configure. The transceiver uses a control interface, which is equipped with a large LCD screen, a multifunction knob, and few buttons.
- Nominal RF output power over the full FM range particularly stable against time.
- Power section entirely modular and highly reliable.
- RF output stage with reverse intermodulation figure lower than the standard bipolar construction.
- Low level of dissipation.
- Stable, reliable power supply.
- Easy diagnosis and easy-to-read parameters.
- Compliance with the strictest regulations.

Product Specifications

CABLE AML

EM 100 DIG PLUS

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)
AES/EBU DIGITAL INPUT CONNECTOR (OPTIONAL)	XLR(F), 110Ω balanced until 192 kHz
SEPARATION BETWEEN CHANNELS (OPTIONAL STEREO GENERATOR)	60dB
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, 25/50/75 microseconds
NOMINAL RF OUTPUT POWER	100W
TRANSMITTER TUNING STEPS	10/100KHz
OUTPUT POWER ALC STABILITY	±3%
HARMONICS AND SPURIOUS EMISSIONS	<80dBc
RF OUTPUT IMPEDANCE	50Ω
RF OUTPUT CONNECTOR	N type
RF SAMPLER CONNECTOR	BNC type
POWER SUPPLY	Single phase 110-230Vac ±15% 50/60Hz
OPERATING TEMPERATURE RANGE	0 to 40°C recommended, -10 to +55° max.
CONSUMPTION	141VA (100W)
RELATIVE HUMIDITY	Up to 95% not condensed