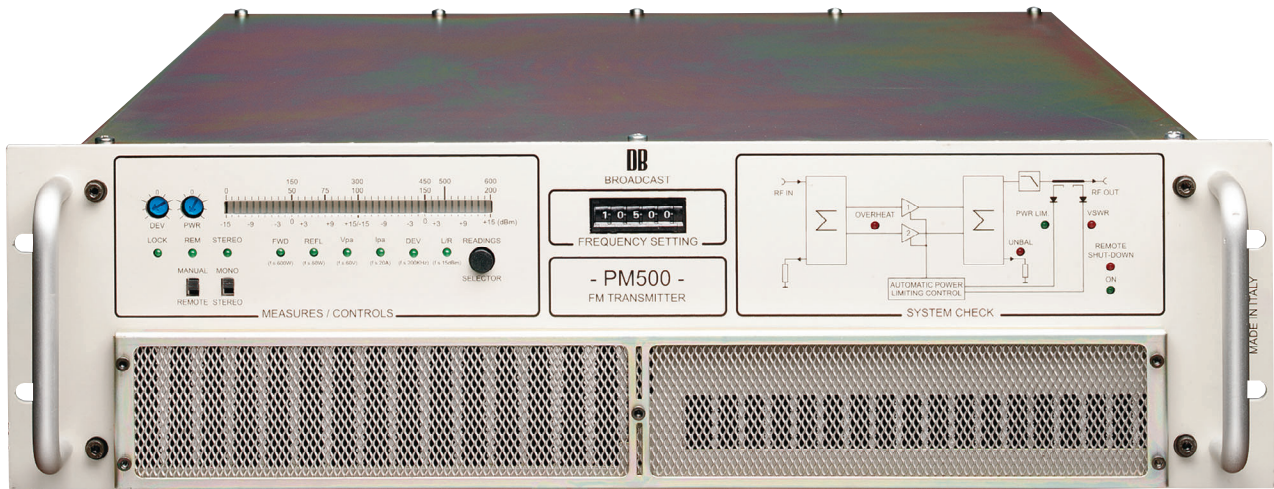


# COMPACT FM TRANSMITTER/EXCITER PM 500



- **0 - 520 W** maximum output power continuously adjustable by external control. Ideal as stand-alone transmitter or versatile exciter for power amplifiers.
- **COLD FET™** technology. This revolutionary technology, a DB Elettronica international patent, is used in the KF Series amplifiers to optimize the output matching of MOS-FET transistors in order to obtain broadband amplification stages without RF components with a typical RF efficiency > 80 %. This means:
  - lower heating
  - higher devices safety
  - higher total reliability
  - low AC power consumption
- **87.5 ÷ 108 MHz.** Instant internal or front panel (/C option) frequency programmability with 10 KHz steps. No tuning or adjustments required.
- **Digital stereo coder.** High performances built-in digital stereo coder (/S option) with stereo separation ( $\geq 65$  dB) and signal/noise ratio ( $\geq 80$  dB) for a top sound quality.
- **Remote control.** Full remote control capability (/R option) with all main parameters in internal optional board. Power output adjustment, on/off, alarms reset, Pwd, Pref, frequency deviation measurement and alarms status are the main possibilities of remote control function.
- **FSK IDer.** FSK option makes the PM transmitter series fully compatible with FCC automatic identification system.
- **Top quality sound.** The generated signal is characterized by an excellent signal/noise ratio and by negligible residual AM and FM. All this guarantees the best quality of the broadcast signal.
- **High frequency stability** in short and long terms is assured



- by Digital Phase Locked Loop circuit with low drift quartz. For better frequency stability the /HS option is available.
- **Deviation limiter.** Limits the maximum frequency deviation to a value within the international requirements. This is to avoid adjacent channels invasion in case of accidental over modulation.
- **Electronic protections:** in event of overvoltage (O.V.P) or transmitting frequency error (LOCK) or mismatching (VSWR) or overtemperature (TEMP) the power output is automatically reduced to keep your station on the air. Every alarm event is displayed by front panel LEDs.
- **Meters:** forward power, reflected power, frequency deviation, all internal mains power supply voltages, L & R, MPX levels are continuously displayed by front panel meters.
- **Adjustments and settings.** Output power (PWR adj.), frequency deviation (DEV adj.), transmitting frequency (with /C option), compression threshold and level together with release time (with /P option), manual/remote function (with /P option), mono/stereo function (with /S option) are front panel available for instant adjustment and setting.
- **Switching mode power supply.** High efficiency switching mode power supply gives greater reliability and reduce the power consumption.
- **Battery operation** is also available as option (/VDC).
- **Meets or exceeds** international standards for safety and electrical specifications.



# PM 500

## TECHNICAL CHARACTERISTICS

RF Data	Output frequency range	87.5 ÷ 108 MHz
	Output frequency setting (front panel digitswitches microprocessor controlled with /C option )	synthesized with PLL, 10 kHz step
	Output impedance	50 Ω
	Output connector	N
	Continuous output power	from 0 to 520 W front panel adjustable
	<b>Frequency stability:</b>	
	Thermal drift (0 ÷ 50° C)	± 1 kHz (better on request)
	Aging drift	± 300 Hz year
	Harmonics	≤ - 72 dB
	Spurious	≤ - 80 dB
	Syncro AM modulation	≤ - 60 dB
	Asynco AM modulation	≤ - 65 dB
AF Data	<b>Mono operation:</b>	
	Input level	- 8 ÷ + 9 dBm adjustable
	Input connector	XLR balanced
	Input impedance	600 Ω
	Bandwidth (± 0.25 dB)	20 Hz ÷ 15 kHz
	Attenuation for frequency ≥ 19 kHz	≥ 50 dB
	Preemphasis	50 / 75 μs
	S/N ratio (± 75 kHz dev. with 1 kHz input, unweighted)	≥ 78 dB
	THD+N (± 75 kHz dev. with 1 kHz input, unweighted)	≤ 0.1 %
	<b>Stereo operation (with stereo coder included in /S models):</b>	
	L & R input level	- 8 ÷ + 9 dBm adjustable
	Input connectors	XLR balanced
	Input impedance	600 Ω
	Bandwidth (± 0.25 dB)	20 Hz ÷ 15 kHz
	Attenuation for frequency ≥ 19 kHz	≥ 50 dB
	Preemphasis	50 / 75 μs
	S/N ratio (± 75 kHz dev. with 1 kHz input, unweighted)	≥ 72 dB
	THD+N (± 75 kHz dev. with 1 kHz input, unweighted)	≤ 0.1 %
	Stereo separation	≥ 60 dB (65 dB tip.)
	<b>Stereo operation (with external stereo coder):</b>	
MPX input level	2.2 Vpp per 75 kHz dev.	
Input connector	BNC	
Input impedance	10 kΩ	
Bandwidth (± 0.2 dB)	20 Hz ÷ 100 kHz	
SCA 1, SCA 2, SCA 3	Input level	2.2 Vpp per 7.5 kHz dev.
	Bandwidth (± 0.25 dB)	40 ÷ 100 kHz
Metering	± 12 V, + 48 V, forward and reflected power, MPX level , 19 kHz, L & R, deviation	
Alarms	VSWR, Overtemperature, Overvoltage	
Power supply	Operating voltage	110/220/240 Vac ± 10 %, 50/60 Hz
	Power consumption (at maximum output power)	860 VA
	Battery operation (opt.)	48 Vcc
Operating conditions	Cooling	air forced, 24Vcc axial fans
	Temperature range	- 10° ÷ + 45° C
	Humidity	95% max.
Weight and size	Weight	29 kg
	Dimensions:	WxDxH 435x530x168 mm
	Cabinet	19"x 4U
Options	Front panel frequency setting	/C
	Stereo coder	/S
	Audio processor	/P
	Remote control	/R
	Battery operation	/VDC

Features and specifications subject to change without notice.