

COMPACT FM TRANSMITTERS/EXCITERS

PM 120, PM 200, PM 300



- **120 W (PM 120), 200 W (PM 200), 300 W (PM 300)** maximum output power continuously adjustable by external control. Ideal as stand-alone transmitter or versatile exciter for power amplifiers.
- **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 (≥ 65 dB) and signal/noise ratio (≥ 80 dB) for a top sound quality.
- **Audio processor.** High performances built-in stereo audio processor (/P option) with wide range compression threshold and release time adjustments. Fully compatible with digital audio mixing consoles.
- **Remote control.** Full remote control capability (/R option) with all main parameters in internal optional board. Power output adjustment, on/off, alarms reset, P_{fwd}, 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 /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.
- **Output low pass filter.** It assures a pure RF spectrum, according to the international requirements.
- **Switching mode power supply.** High efficiency switching mode power supply gives greater reliability and reduces the power consumption.
- **Battery operation** is also available as option (/VDC).
- **Meets or exceeds** international standards for safety and electrical specifications.

PM 120 / PM 200 / PM 300

TECHNICAL CHARACTERISTICS

RF Data	Output frequency range	87.5 ÷ 108 MHz
	Output frequency setting (front panel digiswitches microprocessor controlled with /C option)	synthesized with PLL, 10 kHz step
	Output impedance	50 Ω
	Output connector	N
	Continuous output power	from 0 to 120 W adj. (PM 120) from 0 to 200 W adj. (PM 200) from 0 to 300 W adj. (PM 300)
	Frequency stability:	
	Thermal drift (0 ÷ 50° C)	± 1 kHz
	Aging drift	≤ 300 Hz year
	Harmonics	< - 70 dB
	Spurious.	≤ - 80 dB
	Syncro AM modulation	≤ - 60 dB
Asyncro AM modulation	≤ - 65 dB	

AF Data	Mono operation:	
	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, 50 μs deemphasis)	≥ 78 dB
	THD+N (± 75 kHz dev. with 1 kHz input, unweighted)	≤ 0.1 %
	Stereo operation (with stereo coder included in /S models):	
	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, 50 μs deemphasis)	≥ 72 dB
	THD+N (± 75 kHz dev. with 1 kHz input, unweighted)	≤ 0.1 %
	Stereo separation	≥ 55 dB (60 dB tip.)
	Stereo operation (with external stereo coder):	
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
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Alarms	VSWR, Overtemperature, Overvoltage
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Power supply	Operating voltage	110/220/240 Vac ± 10 %, 50/60 H
	Power consumption (at maximum output power)	215 VA (PM 120) 330 VA (PM 200) 480 VA (PM 300)
	Battery operation (opt.)	24 Vcc

Operating conditions	Cooling	air forced, 24Vcc axial fans
	Temperature range	- 10° ÷ + 45° C
	Humidity	95% max.

Weight and size	PM 120	27 kg	19" x 3U	WxDxH 430x495x125 mm
	PM 200	28 kg	19" x 3U	WxDxH 430x495x125 mm
	PM 300	32 kg	19" x 3U	WxDxH 430x495x125 mm

Options	Front panel frequency setting	/C
	Stereo coder	/S
	Audio processor	/P
	Remote control	/R
	Battery operation	24 VDC

Features and specifications subject to change without notice.