

MODEL NUMBER:
PA2500M

**Low Noise
Broadband Amplifier**



The PA2500M low noise broadband amplifiers by The EMC Shop offer exceptional performance at a very competitive price. Covering a bandwidth of more than 11 octaves, they provide outstanding flatness, 30 dB of gain, very low noise figure, and an optional built-in battery for more than 20 hours of field operation.

These amplifiers are ideal for Electromagnetic Compatibility (EMC) testing and certification. The low noise figure and high gain of the PA2500M permits the visualization of signals that would otherwise appear below the noise floor in a radiated emissions test.

Designed and manufactured in the U.S.A., the PA2500M conforms to the European RoHS requirements and is ECCN EAR99.

FEATURES

- **MULTIPLE APPLICATIONS**
Electromagnetic Compatibility (EMC) testing Instrumentation Antenna field measurements Communication systems
- **BROADBAND PERFORMANCE** 30 dB of flat gain from 1 MHz to 2.5 GHz
- **OPTIONAL BUILT-IN BATTERY** More than 20 hours of operation in the field
- **READY FOR THE TOUGHEST ENVIRONMENT** Wide operating temperature range. IP65 / IP60 compliant

ELECTRICAL SPECIFICATIONS (VALID OVER THE ENTIRE TEMPERATURE RANGE)

	PA2500MA (external dc power)			PA2500MB (internal battery)			UNIT
	Min	Typ	Max	Min	Typ	Max	
Frequency range	1		2500	1		2500	MHz
Gain	30	31.5	33	30	31.5	33	dB
Input & output impedance		50			50		ohm
Input VSWR			2:1			2:1	dB
Output VSWR			2:1			2:1	dB
P1dB	15	20	21	15	20	21	dBm
Noise figure > 50 MHz	1.5	2.2	3.5	1.5	2.2	3.5	dB
Non-harmonic spurious			-70			-70	dBc
Operating supply voltage	8	12	15	15	16.5	18	V dc
Current consumption (depends on dc voltage and battery charge level)		150		65 (15 V)		550 (15 V)	mA
ESD & transient protection	Yes, RF input, RF output and DC						
Reverse polarity protection	Yes, non destructive						
Maximum input/ reverse output power			17			17	dBm
Maximum input/output dc voltage			10			10	V dc

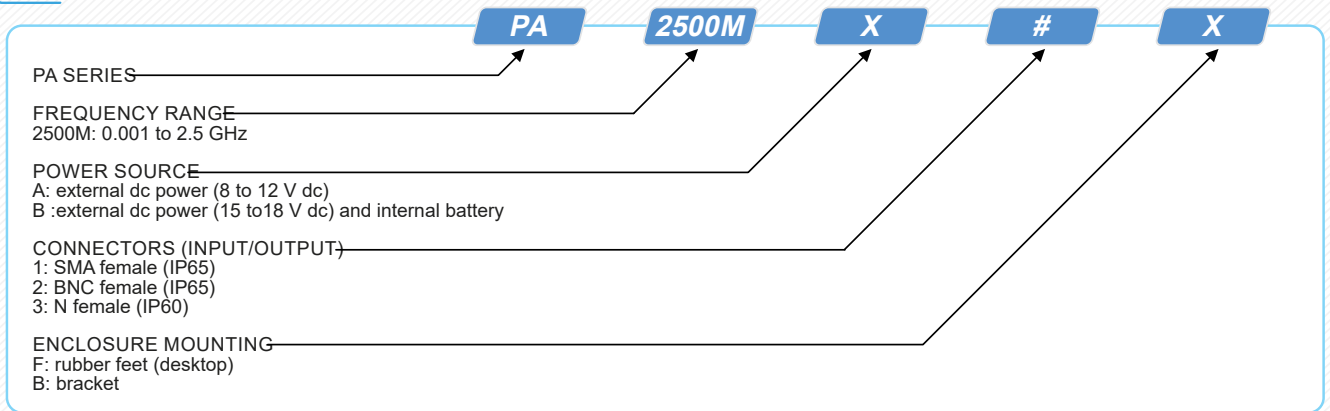
MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

	PA2500MA (external dc power)	PA2500MB (internal battery)	UNIT
Operating temperature	-30 to 85	0 to 50	°C
DC supply connector	Waterproof circular connector with threaded lock		
Dimensions (excl. connectors and feet)	W: 4.25 (108.0), H: 2.31 (58.61), D: 6.73 (171.0) no bracket; 7.52 (191.0) with bracket		inch (mm)
Weight	1.45 (0.65)	2.5 (1.1)	lb (kg)
IP rating	IP65 with BNC and SMA connectors / IP60 with N connectors		

ACCESSORIES

External ac adaptor: 90 to 264 V ac, 47 to 63 Hz; European and US plugs; CE and UL approved.

PART NUMBER



LOW NOISE BROADBAND AMPLIFIER PA2500M Typical Measured Performance at 25 °C

