



MODEL NUMBER:

PA18G

LOW NOISE BROADBAND AMPLIFIER 100 MHz – 18 GHz

• MULTIPLE APPLICATIONS

Electromagnetic Compatibility (EMC) testing Instrumentation Antenna field measurements Communication systems

• BROADBAND PERFORMANCE

24 or 48 dB of flat gain from 100 MHz to 18 GHz

• OPTIONAL BUILT-IN BATTERY

Internal battery for field operation and zero electrical noise or power cables

• READY FOR THE TOUGHEST

Wide operating temperature range. IP65 compliant

The **PA18G** low noise broadband amplifiers by US Microwave Laboratories offer exceptional performance at a very competitive price. Covering the bandwidth between 100 MHz and 18 GHz, they provide 24 or 48 dB of flat gain, very low noise figure, and an optional built-in battery and smart charger.

These amplifiers are ideal for Electromagnetic Compatibility (EMC) testing and certification. The low noise figure and high gain of the **PA18G** permit 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 **PA18G** conforms to the European RoHS requirements and is ECCN EAR99.

ELECTRICAL SPECIFICATIONS (VALID OVER THE ENTIRE TEMPERATURE RANGE)

	PA18GA (24 dB gain)			PA18GB (48 dB gain)			UNIT
	Min	Typ	Max	Min	Typ	Max	
Frequency range	0.1		18	0.1		18	GHz
Nominal gain	24	24.5	25	48	49	50	dB
Gain flatness	±1.5			±3			dB
Input & output impedance	50			50			ohm
Input VSWR	2.5:1			2.5:1			
Output VSWR	2.5:1			2.5:1			
P1dB	12		16	12		16	dBm
Noise figure > 1 GHz	2.5	3	4.5	2.5	3	4.5	dB
Operating supply voltage	17	18	19	17	18	19	V dc
Internal battery External dc power	11	12	15	11	12	15	V dc
Current consumption Internal battery	65		690	65		870	mA
External dc power		190		370			mA
Reverse polarity protection	Yes, non destructive						
Maximum input/reverse output power	17			17			dBm
Maximum input/output dc voltage	5			5			V dc

MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS

	PA18GA (external dc power)	PA18GB (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	1.2/1.3 (0.54/0.59)	1.8/1.9 (0.82/0.86)	lb (kg)
IP rating	IP65		

ACCESSORIES

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

PART NUMBER

