

USMC18400 Low Noise Broadband Amplifier

18 GHz - 40 GHz



- **MULTIPLE APPLICATIONS**

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

- **BROADBAND PERFORMANCE**

35 dB of flat gain from 18 GHz to 40 GHz

- **OPTIONAL BUILT-IN BATTERY**

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

- **READY FOR THE TOUGHEST ENVIRONMENT**

Wide operating temperature range. IP60 compliant

The USMC18400 low noise broadband amplifiers by US Microwave Laboratories offer exceptional performance at a very competitive price. Covering the bandwidth between 18 GHz and 40 GHz, they provide 35 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 USMC18400 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 USMC18400 conforms to the European RoHS requirements and is ECCN EAR99.



RF & microwave components and equipment

All our products are designed and manufactured in the U.S.A.



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Phone: (+1) 336-582-0603

Specifications subject to change without notice

Electrical specifications

	USMC18400			UNIT
	Min	Typ	Max	
Frequency range	18		40	GHz
Nominal gain	33.5	35	36	dB
Gain flatness		±2.5		dB
Input & output impedance		50		ohm
Input VSWR			2.25:1	
Output VSWR			2.25:1	
P1dB	10			dBm
Noise figure	3.5	4	5	dB
Operating supply voltage				
Internal battery	17	18	19	V dc
External dc power	11	12	15	
Battery life		10		Hours
Current consumption				
Internal battery	65		690	mA
External dc power		190		
Reverse polarity protection		Yes, non destructive		
Maximum input/reverse output power			10	dBm
Maximum input/output dc voltage			3	V dc

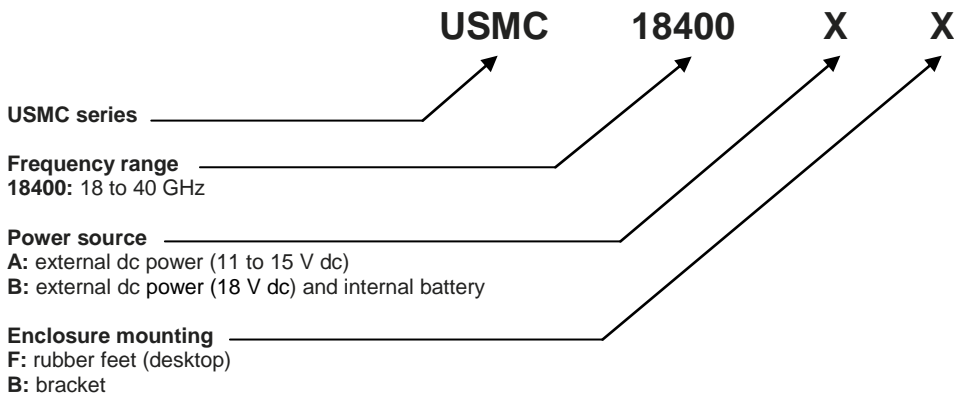
Mechanical and environmental specifications

	USMC18400A (external dc power)	USMC18400B (internal battery)	UNIT
Operating temperature	-30 to 85	0 to 50	°C
DC supply connector	Waterproof circular connector with threaded lock		
RF connectors	2.92 mm female (K type)		
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	1.3 (0.59)	1.9 (0.86)	lb (kg)
IP rating	IP60 with connector caps installed		

Supplied accessories

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

Part number



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