

INNOVATIVE SOLUTIONS FOR MICROWAVE/RF COMPONENTS

The MP1840/75/47MK-A9-R2U15 is a high power amplifier for 1805 - 1880 MHz frequency band. The amplifier system employs LDMOS devices and provides high efficiency, broad band and high dynamic range, protected against over-temperature, over driving, over- power and excessive current draw. It provides remote control function via Ethernet interface for remote access and control. GUI control is provided.

Model: MP1840/75/47MK-A9-R2U15

1. Electrical Characteristics					
Item	Value	Note			
Frequency Range	Tx: 1805 ~ 1880 MHz				
Gain	45 dB (Min.)				
Gain Flatness	± 0.5 dB	ALC Mode Over Freq. Range			
Output P1dB	+ 47 dBm (Min.)				
Output Psat	+ 48 dBm (Min.)				
Output IP3	+58 dBm (Min.)	2 tones @ +40 dBm output power, 1 MHz Spacing			
ACLR @ +37 dBm	- 45 dBc @ ±5 MHz offset from F0 (Max.) (RBW = 30 kHz) -55 dBc @ ±10 MHz offset from F0 (Max.) (RBW = 30 kHz)	Signal Source: WCDMA: 1FA Test Mode 1: 64 DPCH			
Input / Output VSWR	1.4:1 (Max.)	Isolator Included			
Spurious	-70 dBc (Max.)	@ P1dB			
HPA Enable/Disable		Via GUI			
ALC Range	> 25 dB	Set by GUI			
ALC Accuracy	± 0.5 dBm	Over Frequency Band			
Frequency Range	Rx: 1710 ~ 1785 MHz				
Insertion Loss	2 dB (Max.)				
Input / Output VSWR	≤ 1.4				
Isolation Tx to Rx	120 dBc (Min.)				
Max RF Input	+25 dBm	With ALC Control			
AC Input	100 – 240 VAC				
Input / Output Impedance	50 Ω				

2 .Mechanical Characteristics			
Ethernet Interface	RJ-45		
Tx IN/Rx Out Connector	SMA Female		
Tx OUT/Rx IN Connector	N-Type Female		
Dimensions	19" x 2U x 15"		
Weight	25 lb		

3. Environment Characteristics				
Operating Temperature	-20°C ∼ +65°C	Ambient		
Relative Humidity (%)	95%	(Non-Condensing)		

Revision History				
REV	Reason to Change	Date	Initialed by	

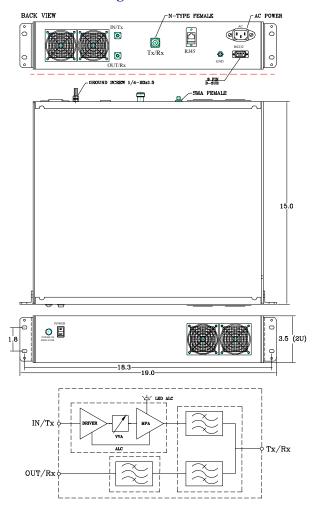
Options Included:

(R2U15), (FPPS), (12V1), (SMA/SMA/N), (SNB), (CONTR), (ETHER), (DPLX)



4. Firmware Control					
Output Power Control	Real Time; 20~47 dBm	Via GUI			
Output Power Monitoring	Real Time; 19~48 dBm	Alarm			
Input Power Monitoring	Real Time; -5~24 dBm	Shutdown @ +20 dBm			
Reverse Power Monitoring	Real Time; 19~48 dBm	Shutdown @ +42 dBm			
Over-Driving Protection	Setting	Alarm			
Current Monitoring	Real-Time	Shutdown @8.0A			
Temperature Monitoring	Real-Time, Above +0°C	Shutdown @ +70°C			
Operating Voltage	Real-Time	Alarm			
Fan Current Monitoring	Real-Time	Alarm			

5. Outline Drawing



SKU # 7XXXXXX