

INNOVATIVE SOLUTIONS FOR MICROWAVE/RF COMPONENTS

The **MP1840/75/50MK-A1-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: MP1840/75/50MK-A1-R2U15

1. Electrical Characteristics					
Item	Item Value				
Frequency Range	Tx: 1805 ~ 1880 MHz				
Gain	50 dB (Min.)				
Gain Flatness	$\pm 0.5 \text{ dB}$	ALC Mode Over Freq.			
Output P1dB	+ 50 dBm (Min.)				
Output Psat	+ 51 dBm (Min.)				
Output IP3	+61 dBm (Min.)	2 tones @ +43 dBm output power, 1 MHz Spacing <u>Signal Source:</u> WCDMA: 1FA Test Mode 1: 64 DPCH			
ACLR @ +40 dBm	 - 45 dBc @ ±5 MHz offset from F0 (Max.) (RBW = 30 kHz) -55 dBc @ ±10 MHz offset from F0 (Max.) (RBW = 30 kHz) 				
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	$\pm 0.5 \text{ dBm}$	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				
Power Consumption	400 Watts (Max.)				
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	$-20^{\circ}C \sim +65^{\circ}C$	Ambient			
Relative Humidity (%)	95%	(Non-Condensing)			

Revision History				
REV	Reason to Change	Date	Initialed by	

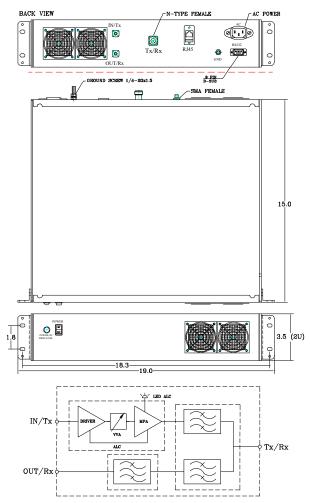
Options Included: (R2U15), (FPPS), (12V1), (SMA/SMA/N), (SNB), (CONTR), (ETHER), (DPLX)



4. Firmware Control

4. Filmware Control				
Output Power Control	Real Time; 22~50 dBm	Via GUI		
Output Power Monitoring	Real Time; 22~50 dBm	Alarm		
Input Power Monitoring	Real Time; -5~24 dBm	Shutdown @ +25 dBm		
Reverse Power Monitoring	Real Time; 22~ 50 dBm	Shutdown @ +48 dBm		
Over-Driving Protection	Setting	Alarm		
Current Monitoring	Real-Time	Shutdown @ 11.0A		
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