

120 Blue Ravine Rd, #2 Folsom, CA 95630

Ph: 916.608.0648 Fax: 916.608.0689 www.premierdevices.com sales@premierdevices.com

MODEL PDC-212-45-15 POWER AMPLIFIER 15 WATTS WCDMA

Parameter	Specifications
Frequency Range	2110-2170 MHz, PART NUMBER: PDC-212-45-15
Pout, average	41.8 dBm (15 Watts)
RF Gain	$45\pm0.5\mathrm{dBm}$
RF Gain over freq range	± 0.5 dB
RF Gain vs. temp.	± 1. 0 dB
In Channel Flatness	0.2dB in each 5 MHz
ACPR	<-50 dBc @5MHz (Main CH from 20 dBm to 43 dBm peak/Avg>10dB)
Chip Rate	3.84 Mc/s
Noise Figure	13 dB max.
Second Harmonic	-45 dBc
Third Harmonic	-60 dBc
Input/Output Return Loss	15 dB min. (50 ohms)
Output Protection	Isolator
DC Input Power	+27 V ± 1V
DC Current @ 28V	6.0 A max at (1) 15W avg RF power
Cooling	Conduction through base plate
Package Outline	Package Style C-100
Environmental	
Operating Temperature	-30°C to + 80°C Base Plate Termperature
Storage Temperature	-40°C to +85°C
Operating Humidity	20 to 80 % RH
Storage Humidity	5 to 95 % RH



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I/O INTERFACES CONTROL & ALARM (9 PIN D-SUB MALE CONNECTOR)

Pin			
Number	Function	Description	Remarks
1	Over Power Alarm Output	If Output exceeds 46± 0.5 dBm, the Over Power Alarm will occur and HPA will disable automatically. The HPA will re-start automatically after 2-3 seconds.	
2	High Temperature Alarm Output	If heat sink temperature exceeds 85°C, the High Temperature Alarm will occur and HPA will disable automatically. The HPA will restart after temperature drops to 70°C.	
3	VSWR Alarm Output	If Reverse Power > 1 Watt, the VSWR Alarm will occur, but HPA will not be disabled.	Normal: TTL Low (0V)
4	N/C		Alarm:
5	N/C		TTL High (5V)
6	Summary Alarm	TTL Low when HPA is enabled and there are no faults. TTL High when any fault occurs	
7	HPA On/Off	When TTL High (2.4V - 5.0V) enters into this Pin, HPA should be turned off. When TTL Low (0V - 0.8V) enters into this Pin, HPA should be turned on.	
8	Power Detection	1 - 4 Vdc (0.12 V/dB step) analog detector voltage for power levels of 20 dBm - 45 dBm (1V = 20dBm, 4V = 45 dBm).	
9	GND	Ground	

DC Power Connector (3 Pin D-sub Male Connector)

Pin#	Description
1	+28 Vdc
2	Ground
3	N/C



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