



## PB400-1000-20 400-1000 MHz – 20W Solid State Broadband High Power Amplifier

The PB400-1000-20 is a 20W, Class A/AB linear laboratory bench top amplifier for the 400-1000 MHz band. It offers superior performance with high gain and power in a small enclosure using advanced broadband matching techniques and the finest Gold LDMOS transistors available on the market today. Matched for 50 ohms input and output, the PB400-1000-20 provides 20 watts typical P1dB. It's rugged housing and high performance making it the natural choice for broadband testing.



Specifications (@ 25°C ambient air)				
Parameter	Min.	Typ.	Max.	Unit
Frequency	400		1000	MHz
Pout P1dB	15	20		Watts
Gain	42	44		dB
Gain Flatness		+/-1.5		dB
Power In		0.8	1.3	Watts
Input Return Loss			-14	dB
2 <sup>nd</sup> Harmonic		-30	-16	dBc
3 <sup>rd</sup> Harmonic		-40	-30	dBc
Ambient Operating Temperature	0		+55	°C
Dimensions	8"W x 12"L x 5"H			
Electrical Supply	88 ~ 132VAC or 176 ~ 264VAC, single Ø, 47-63Hz			
AC current typical	1.5A @ 120VAC			
Dimensions	8.0"W x 12.0"L x 5.0"H 203.3mm x 304.8mm x 127mm			
Connectors	RF In & RF Out SMA			

### Features

- 20 Watts typical P1dB Class A/AB
- 50 ohms input/output
- Bandwidth 400 – 1000 MHz
- Internal cooling
- Over Temperature Protected <sup>(1)</sup>
- Easy access fuse
- Small Size
- Low power consumption
- On/Off Switch, LED display
- 88-132VAC or 176-264VAC supply (factory set)

RF Maximum Ratings	
Parameter	Units
Load Mismatch	3:1
Storage Temperature	-40°C to +150°C
Ambient Operating Temperature	0°C to +55°C

**Power Module Technology • 3107 N. Deer Run Road, Suite 20, Carson City, Nevada 89701 USA.**

Tel: +1.775.883.1122 e-mail: [sales@pmtrf.com](mailto:sales@pmtrf.com) web: <http://www.pmtrf.com>

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**400-1000 MHz – 20W**  
**Solid State Broadband**  
**High Power Amplifier**



Front View



Rear View

Notes:

1. Should overheating occur, the amplifier will automatically shut down. Immediately switch the AC power off and determine if the ambient air temperature is too high or if the amplifier should be returned for repair. Failure to switch the AC power off under automatic shut down will cause the amplifier to cycle on and off with temperature.

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Revision History

01-11-11

Data Sheet

We Listen to your comments

If there is any information within this document that you feel is wrong, unclear or missing, please give us your feedback as it will help us to continuously improve The quality of this document. Please send your suggestions (including a reference To this document) to:

[Bob.Todd@PMTRF.com](mailto:Bob.Todd@PMTRF.com)

To request other information please call 1-775-883-1122

Attention please:

The information herein is given to describe certain components and shall not be Considered as a guarantee of characteristics. Terms of delivery and rights to Technical change reserved.

For further information on technology, delivery terms, conditions and prices, please Contact the sales department at PMT headquarters at 1-775-883-1122

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