



# Solid State High Power Amplifier

1.0 – 3.0 GHz, 500 Watt, Wide Instantaneous Bandwidth, Built-in protection

## Broadband Series: PA2037

### FEATURES

Rack mounted system  
 Class AB linear GaN design  
 1.0 – 3.0 GHz  
 500 Watt output power  
 43 dB gain

180 - 240 Volt operation

Built-in remote control, monitoring and protection

### APPLICATIONS

Suitable for all modulation standards  
 EMI / EMC test equipment  
 Lab test equipment

### Linear GaN. All modulations. Line powered

#### Pushing limits.

Broadband performance verification or immunity testing requires both power and bandwidth. The MtronPTI PA2037 Solid State Power Amp provides a 500 Watts of CW power across full bandwidth and less than 3.0 dB<sub>p.p</sub> gain flatness along with full remote monitoring and control.

MtronPTI's line of Solid State Power Amplifiers is backed by a multi-national design and manufacturing team with more than 150 years combined PA design experience. MtronPTI's continuing focus on client service ensures full program life engineering support from specification to production to next generation architecture planning.

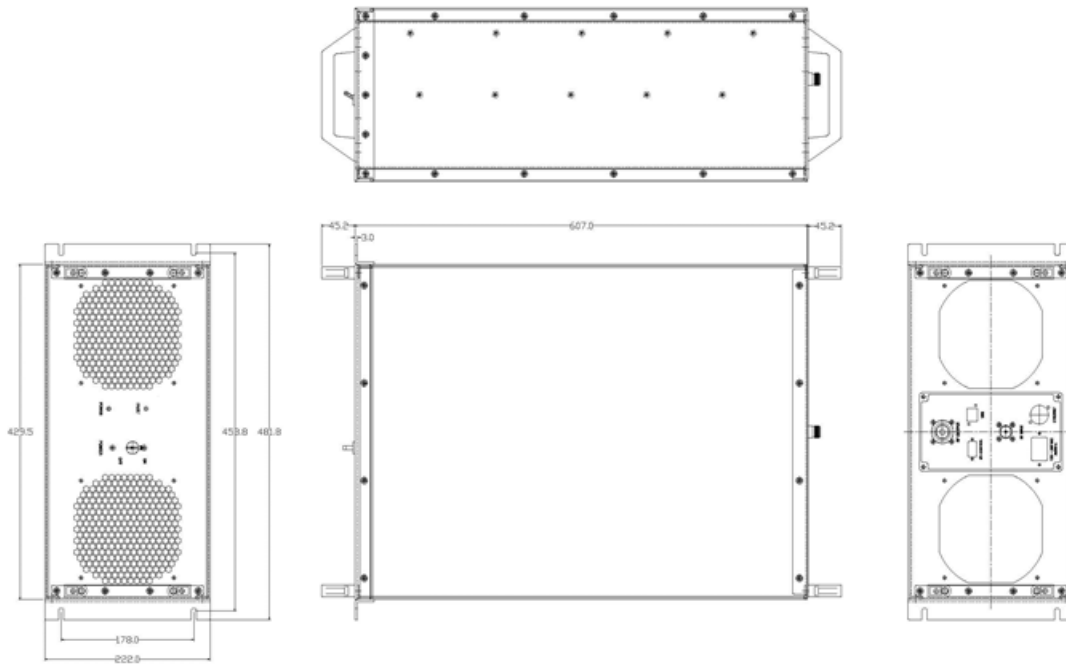
### Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Comment
<b>PASSBAND</b>						
Operating Frequency Range	$F_{CARRIER}$	1.0		3.0	GHz	
Power Output	$P_{OUT\_SAT}$		500		Watts	Saturated CW
Power Output	$P_{OUT\_1dB}$	300			Watts	@ 1 dB GCP
Small Signal Gain	$A_{RF\_MIN}$	57			dB	
Power Gain Flatness				3.0	dB <sub>p.p</sub>	$A_{RF\_MAX} - A_{RF\_MIN}$
Input Return Loss	$RL_{IN}$	10			dB	Within the $F_{SIG}$ bandwidth into 50Ω
2-tone Intermodulation (IMD)			-30		dBc	47 dBm/tone, $\Delta = 1$ MHz
Harmonics			-20		dBc	At rated POUT
Non Harmonic Spurious				-60	dBc	
<b>Power</b>						
Operating Voltage	$V_{AC}$	100		240	$V_{AC}$	
Power Consumption	$P_{DISS}$			2000	Watts	
Max Input Power	$P_{IN\_MIN}$			+8	dBm	Without damage
Load VSWR Protection			$\infty : 1$			

### Environmental & Physical

Parameter	Symbol	Min.	Typ.	Max.	Units	Comment
Operating Case Temperature	$T_{OC}$	0		+50	°C	
Storage Temperature	$T_{STR}$	-40		+85	°C	
Relative Humidity		5		95	%	Non-condensing
Dimensions			5U			Rack mount chassis
Weight				35	kg	
RF Connectors IN / OUT			Type N female			
AC Power / Interface			IEC 60320-C14 / 9-Pin D-Sub			
Optional: digital monitor & control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP			Ethernet RJ-45 TCP/IP, RS422/485, GPIO			Remote Bluetooth application

Case Outline



Revision History

Date	Rev.	Orig.	Details of Revision
20150317	A	DPD	Initial

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