



MTPA0050-1
Broadband Power Amplifier
Operation Manual

1. Product Description

The MTPA0050-1 Amplifier is a broadband, high power, high gain instrumentation grade amplifier. The amplifier was designed to provide exceptional gain flatness per octave over greater than 5 octaves of frequency coverage. The 10 MHz to 50 GHz amplifier provides up to 28dB of gain and 30dBm output power with low harmonics and low residual phase noise.

FEATURE

- 0.01~50GHz ultra-broadband
- Psat:28dBm
- High efficiency , High reliability.
- Good linearity , Low distortion.

Applications: Test & Measurement, Broadcasting, Communication etc.



GENERAL SPECIFICATION

Parameter	Unit	Min.	Typical.	Max.	
Frequency	GHz	0.01	-	50	
Small Signal Gain	dB	0.01-2GHz	25	-	-
		2-10GHz	28	-	-
		10-26GHz	28	-	-
		26-40GHz	27	-	-
		40-50GHz	20	-	-
Gain Flatness	+/-dB	-	5	-	
Psat	dBm	0.01-2GHz	23	-	-
		2-10GHz	28	-	-
		10-26GHz	26	-	-
		26-40GHz	24	-	-
		40-50GHz	22	-	-
INPUT Return Loss	dB	-	-7	-	
Maximum input power	dBm	-	-	15	
Harmonic	dBc	-	-15	-	
Spur	dBc	-	-55	-	

2. Specification

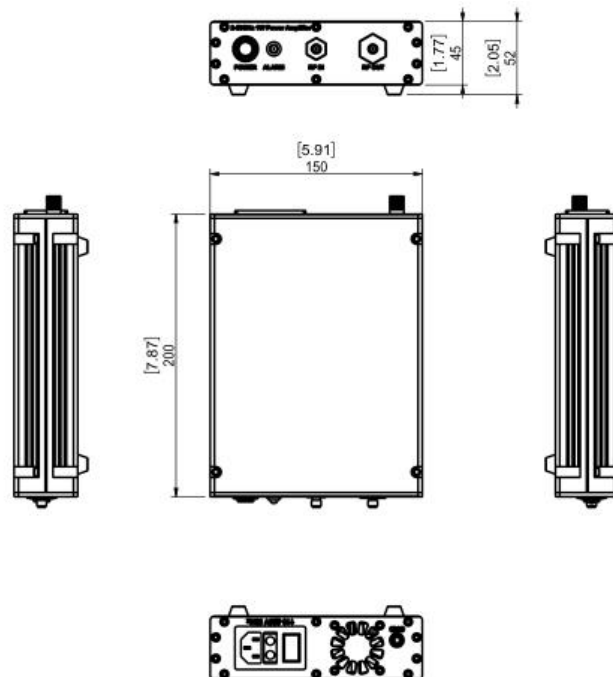
ENVIRONMENTAL SPECIFICATIONS

Parameter	Unit	Min.	Typical	Max.
Voltage	V(AC)	110	220	-
Current@220V	A	-	0.1	-
Operating Temperature	°C	0	-	50
Non-Operating Temperature	°C	-20	-	65

MECHANICAL SPECIFICATIONS:

Parameter	Unit	Min.	Typical	Max.
Dimensions	mm	-	200×150×52	-
LxWxH	inch	-	7.87×5.91×2.05	-
Weight	Kg	-	2	-
RF Input&Output	-	1.85mm Female		

MODEL APPEARANCE



Unit: mm(inch)

3. Operational Instructions

- **Always keep the voltage within 110-220V. It is suggested to connect the AC power wire first, then turn on the rear AC switch. Finally, switch on the front DC button.**
- **The MAX input power is +15dBm .**
- **Please always connect a good load or an attenuator that can handle 5W or higher at the output port of the amplifier. Cool the attenuator properly.**