

# MT 500

MT Range: 80 MHz - 1000 MHz / 500 W CW



## Prana MT 500

- Class A solid state
- Broadband (instantaneous single band): 80 MHz – 1000 MHz
- Typical output power : 500 W CW
- Linear output power guaranteed with harmonics < -20 dBc
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to N-MT 900 possible (24U)
- Reliable, efficient and robust
- 19" Rack
- 3 years standard warranty

## Maintenance

- Amplifier designed for minimal maintenance
  - Easy access to all parts
  - Modular design
  - Repairs with minimum adjustments
- Rapid diagnostic
- Minimal downtime
- Contract for preventive and corrective maintenance available

## Applications

- EMC tests
- RF tests and instrumentation
- Radiocommunication
- Measurement and research laboratories

## Versions

- MT 500 D amplifier with:
  - Multicolor LCD display with touch panel
  - Digital control
  - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
  - Temperature controlled fans
  - Safety interlock
- MT 500 DC : MT 500 D with :
  - Integrated dual directional coupler
  - display of instantaneous incident and reflected power

## MT Range

- MT 140 => 140 W CW
- MT 250 => 250 W CW
- MT 500 => 500 W CW
- MT 900 => 900 W CW
- MT 1450 => 1450 W CW
- MT 1650 => 1650 W CW
- MT 2400 => 2400 W CW
- MT 3500 => 3500 W CW

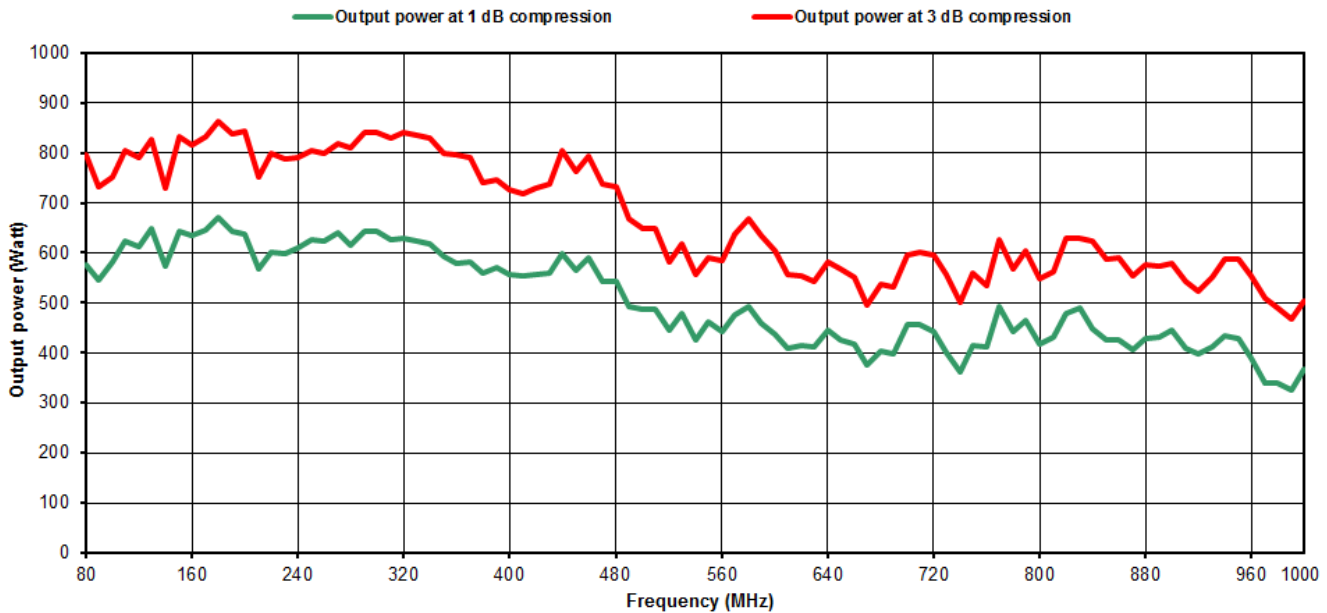
## Extra

- External coupler
- Supply and integration inside a cabinet
- RF Power cable
- Switching unit

MT50005JUN2023 - Electrical and Mechanical Specifications subject to change without notice.

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## Specifications

Frequency bandwidth	80 MHz - 1000 MHz
Typical output power	500 W
Power at 3 dB compression	550 W min. up to 450 MHz / 400 W min. from 450 MHz to 1000 MHz
Power at 1 dB compression	450 W min. up to 450 MHz / 300 W min. from 450 MHz to 1000 MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression
Class type	Class A
Gain	54 dB
Linear power gain flatness	± 3 dB max
Mismatch tolerance	infinite without damage
Input impedance	50 ohms / VSWR: 2:1 max
Output impedance	50 ohms / VSWR: 2:1 max
Input power	+10 dBm max.
RF input connector	Type N fem. (front or rear panel) – other connector type on request
RF output connector	Type N fem. (front or rear panel) – other connector type on request
Safety interlock	Connector type BNC
Digital control	Transistors, power supplies, temperatures, fans
Communication interface	Ethernet, USB, GPIB, RS232
Color LCD Display with touch screen	Status, faults, (direct and reverse instantaneous power for DC version)
Ambient operating temperature	0 °C / + 45 °C
Room temperature storage	-20 °C / +70 °C
Cooling	Forced air with fan speed control: 120 l/sec max. (self contained fans)
Power voltage	200-250 VAC, 47-63 Hz, single phase
Rated current	11.1 A at 230 VAC
Dimensions	640 x 450 x 312 mm (7U) / 25.2 x 17.7 x 12.3 in (7U)
Weight	45 kg / 99 lb

## MT 500 DC version :

Integrated bidirectional power coupler	Coupling factor 59 dB typ.
Power coupling connector	Type N fem. (rear panel)
Estimated output power losses due to the coupler	0.3 dB