

# MT 400

MT Range: 80 MHz - 1000 MHz / 400 W CW



## Prana MT 400

- Class A solid state
- Broadband (instantaneous single band): 80 MHz – 1000 MHz
- Typical output power : 400 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 400 W and H < -20 dBc up to 450 MHz and
  - P1dB > 250 W and H < -20 dBc from 450 MHz to 1000 MHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to MT 700 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 400 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- MT 400 DC : MT 400 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

## MT Range

- MT 100 => 100 W CW
- MT 200 => 200 W CW
- MT 400 => 400 W CW
- MT 700 => 700 W CW
- MT 1200 => 1200 W CW
- MT 1400 => 1400 W CW
- MT 1700 => 1700 W CW
- MT 2000 => 2000 W CW
- MT 2800 => 2800 W CW

## Extra

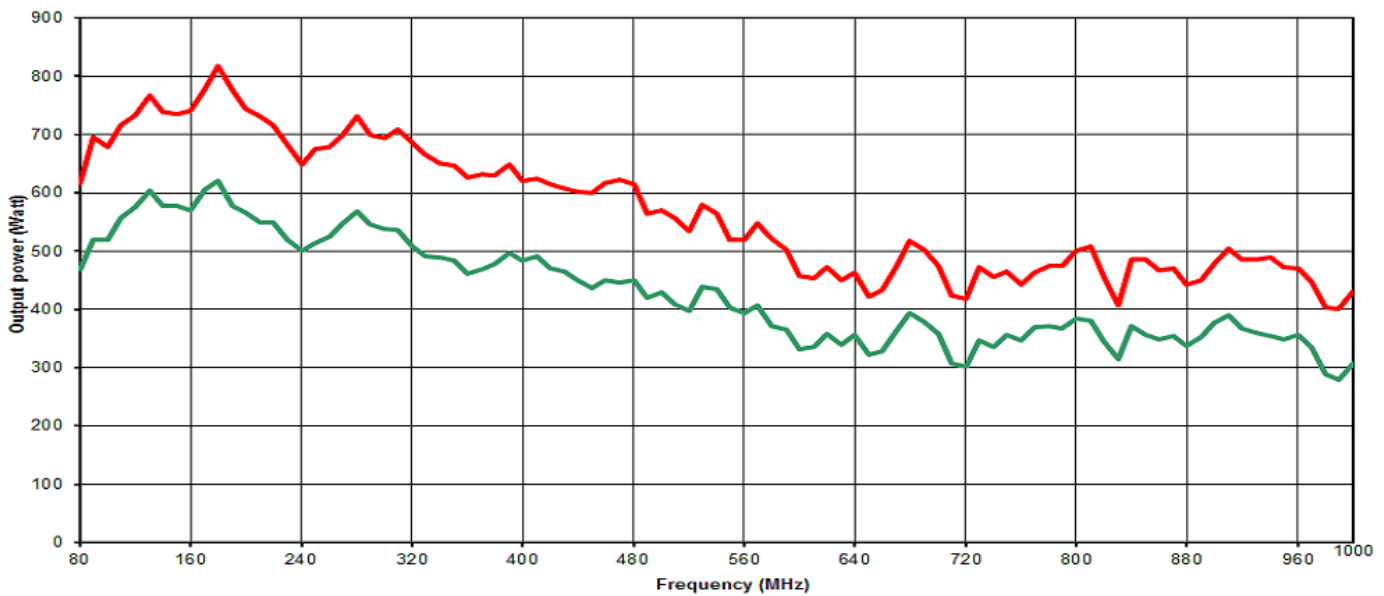
- External coupler
- Supply and integration inside a cabinet
- RF Power cable
- Switching unit

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**PRANA**

— Output power at 1 dB compression — Output power at 3 dB compression



## Specifications

Frequency bandwidth	80 MHz - 1000 MHz
Typical output power	400 W
Power at 3 dB compression	500 W min. up to 450 MHz / 300 W min. from 450 MHz to 1000 MHz
Power at 1 dB compression	400 W min. up to 450 MHz / 250 W min. from 450 MHz to 1000 MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
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 and internal temperature
Communication interface	IEEE 488, RS232
4 lines digital display	Status, faults, (direct and reverse instantaneous power for DC version)
Ambient operating temperature	0 °C / + 35 °C
Room temperature storage	-20 °C / +70 °C
Cooling	Forced air: 120 l/sec max. (self contained fans)
Power voltage	200-250 VAC, 47-63 Hz, single phase
Rated current	10 A at 230 VAC
Dimensions	640 x 450 x 312 mm (7U) / 25.2 x 17.7 x 12.3 in (7U)
Weight	44 kg / 97 lb

## MT 400 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