

# 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 3500 => 3500 W CW

## Extra

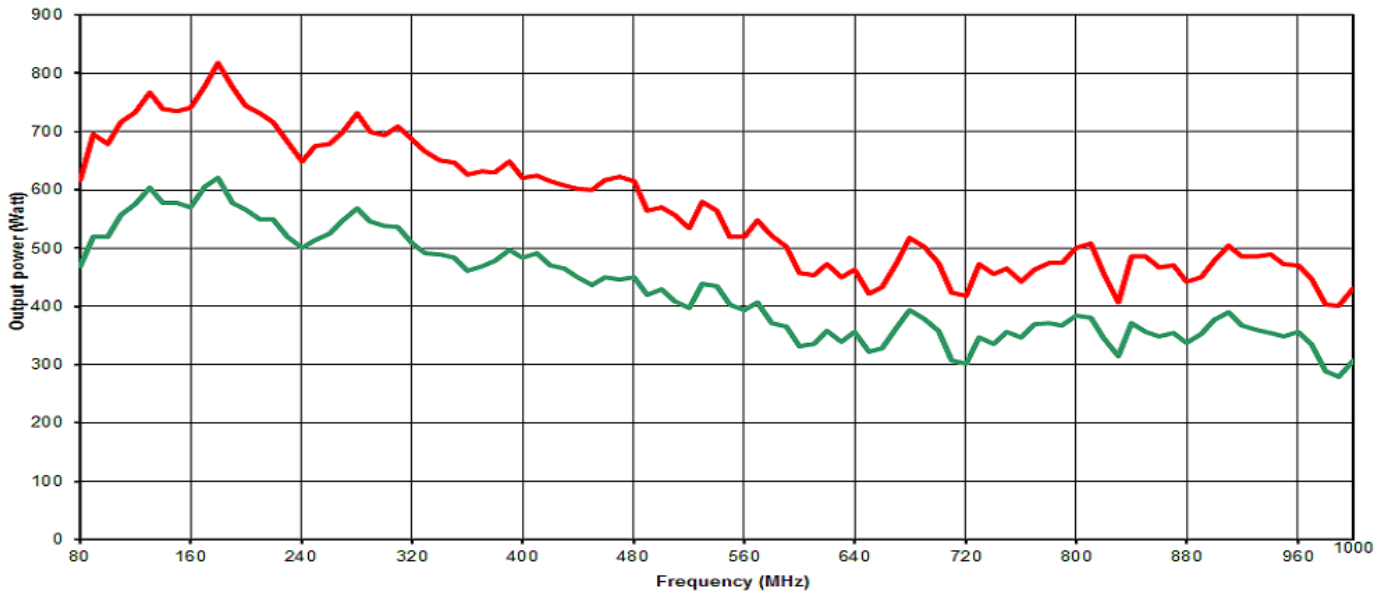
- External coupler
- Supply and integration inside a cabinet
- RF Power cable
- Switching unit

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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, 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	10.2 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 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