

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

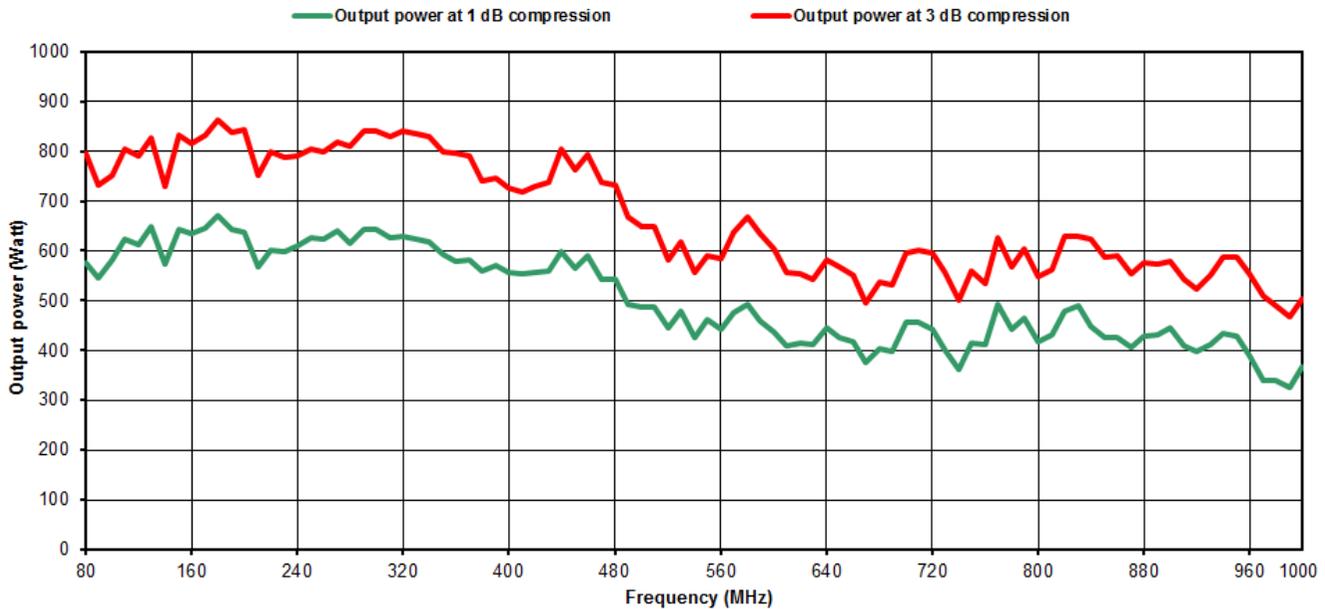
- MT 140 => 140 W CW
- MT 250 => 250 W CW
- MT 500 => 500 W CW
- MT 900 => 900 W CW
- MT 1450 => 1450 W CW
- MT 1650 => 1650 W CW
- MT 2400 => 2400 W CW
- MT 3500 => 3500 W CW

Extra

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

MT 500

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



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 |