

MT 140

MT Range: 80 MHz - 1000 MHz / 140 W CW



Prana MT 140

- Class A solid state
- Broadband (instantaneous single band): 80 MHz – 1000 MHz
- Typical output power : 140 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 250 possible
- 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 140 S : standard amplifier
- MT 140 D amplifier with:
 - Multicolor LCD display with touch panel
 - Digital control
 - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
 - Temperature controlled fans
 - Safety interlock
- MT 140 SC : MT 140 S with
 - Integrated dual directional coupler
- MT 140 DC : MT 140 D with :
 - Integrated dual directional coupler
 - Display of instantaneous incident and reflected power

MT Range

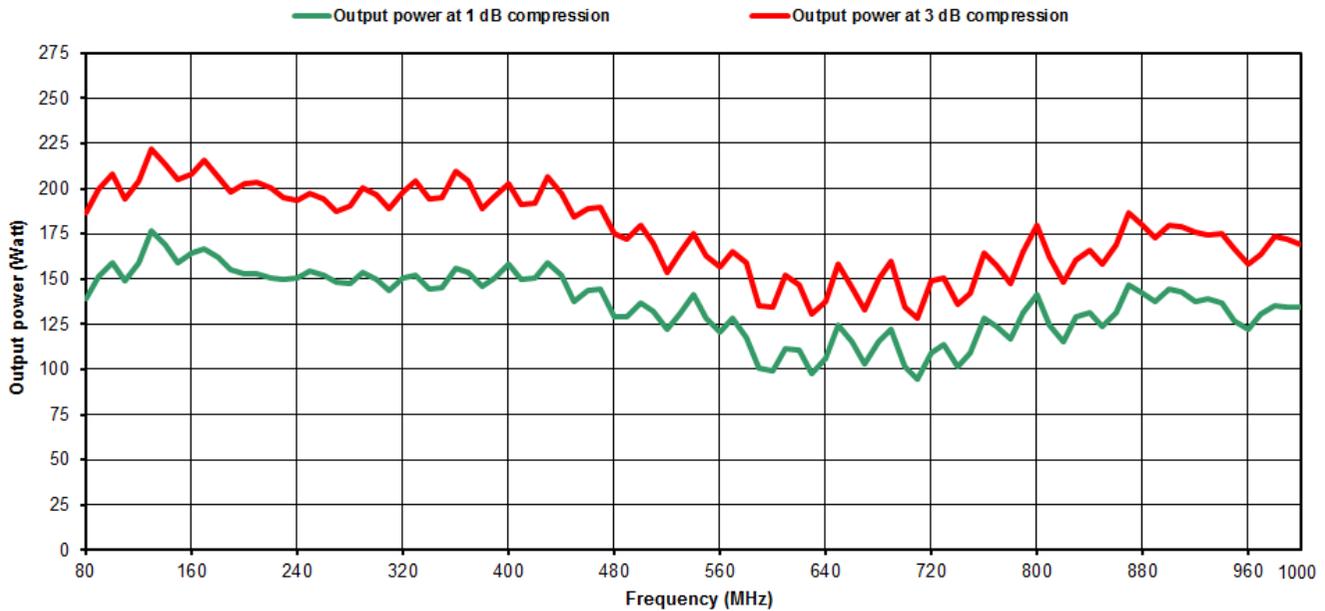
- MT 140 => 140 W CW
- MT 250 => 250 W CW
- MT 500 => 500 W CW
- MT 900 => 900 W CW
- MT 1450 => 1450 W CW
- MT 1650 => 1650 W CW
- MT 2400 => 2400 W CW
- MT 3500 => 3500 W CW

Extra

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

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Specifications

| | |
|-------------------------------|--|
| Frequency bandwidth | 80 MHz - 1000 MHz |
| Typical output power | 140 W |
| Power at 3 dB compression | 155 W min. up to 450 MHz / 125 W min. from 450 MHz to 1000 MHz |
| Power at 1 dB compression | 110 W min. up to 450 MHz / 90 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 | 48 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 |
| Ambient operating temperature | 0 °C / + 45 °C (D version) or 0 °C / + 35 °C (S version) |
| Room temperature storage | -20 °C / +70 °C |
| Cooling | Forced air with fan speed control (for D version): 60 l/sec max. (self contained fans) |
| Power voltage | 90-250 VAC, 47-63 Hz, single phase |
| Rated current | 7.1 A at 110 VAC / 3.4 A at 230 VAC |
| Dimensions | 640 x 450 x 178 mm (4U) / 25.2 x 17.7 x 7 in (4U) |
| Weight | 28 kg / 61.7 lb |

MT 140 D version :

| | |
|-------------------------------------|---|
| 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) |

MT 140 SC and MT 140 DC versions :

| | |
|--|---|
| Integrated bidirectional power coupler | Coupling factor 50 dB typ. (SC version) / 59 dB typ. (DC version) |
| Power coupling connector | Type N fem. (front or rear panel) |
| Estimated output power losses due to the coupler | 0.3 dB |

MT14002DEC2024 - Electrical and Mechanical Specifications subject to change without notice.