

Prana MT 100:

- Class A solid state
- Broadband (instantaneous single band): 80 MHz – 1000 MHz
- Typical output power : 100 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 80 W and H < -20 dBc up to 500 MHz
 - P1dB > 60 W and H < -20 dBc from 500 MHz to 1000 MHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to MT 200 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 100 S** : standard amplifier
- **MT 100 D** : MT 100 S with:
 - ⇒ Display
 - ⇒ Digital control
 - ⇒ IEEE 488 GPIB Communication
- **MT 100 SC** : MT 100 S with :
 - ⇒ Integrated bidirectional coupler
- **MT 100 DC** : MT 100 D with :
 - ⇒ Integrated bidirectional coupler
 - ⇒ display of instantaneous power

MT series:

- 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

Prana additional options:

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



Photo: MT 100 D

Specifications

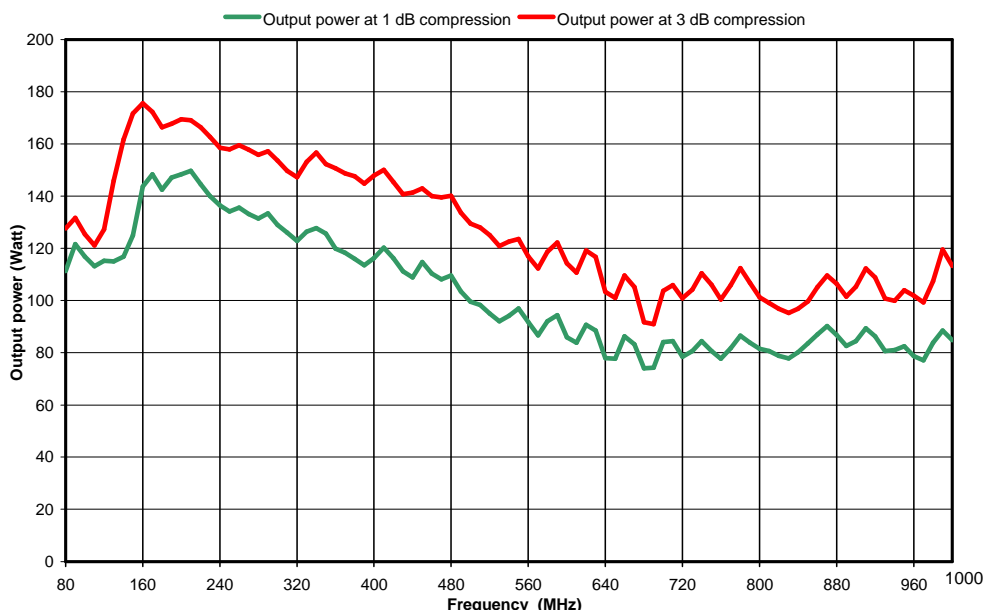
Frequency bandwidth	80 MHz - 1000 MHz
Typical output power	100 W
Power at 3 dB compression	90 W min. up to 500 MHz / 70 W min. from 500 MHz to 1000 MHz
Power at 1 dB compression	80 W min. up to 500 MHz / 60 W min. from 500 MHz to 1000 MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	48 dB
Linear power gain flatness	± 3 dB max
Mismatch tolerance	infinite without damage
Input impedance	50 ohms / VSWR: 2:1max
Output impedance	50 ohms / VSWR: 2:1max
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 / + 35 °C
Room temperature storage	-20 °C / +70 °C
Cooling	Forced air: 60 l/sec max. (self contained fans)
Power voltage	90-250 VAC, 47-63 Hz, single phase
Rated current	6.4 A at 110 VAC / 3 A at 230VAC
Dimensions	630 x 450 x 178 mm (4U) / 24.8 x 17.7 x 7 in (4U)
Weight	32 kg / 70 lb

MT 100 D version

Safety interlock	Connector type BNC
Digital control	Transistors, power supplies and internal temperature
Communication interface	IEEE 488
4 lines digital display	Status, faults, (direct and reverse instantaneous power for DC version)

MT 100 SC and MT 100 DC versions

Integrated bidirectional power coupler	Coupling factor 50 dB (SC version) / 59 dB (DC version) ± 0.4 dB
Power coupling connector	Type N fem. (front or rear panel)
Estimated output power losses due to the coupler	0.3 dB



Electrical and Mechanical Specifications subject to change without notice.