

MT 100

MT Range: 80 MHz - 1000 MHz / 100 W CW



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 > 100 W and H < -20 dBc up to 450 MHz and
 - P1dB > 65 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 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 amplifier with:
 - Multicolor LCD display with touch panel
 - Digital control
 - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
 - Temperature controlled fans
 - Safety interlock
- MT 100 SC : MT 100 S with
 - Integrated dual directional coupler
- MT 100 DC : MT 100 D with :
 - Integrated dual directional coupler
 - Display of instantaneous incident and reflected 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

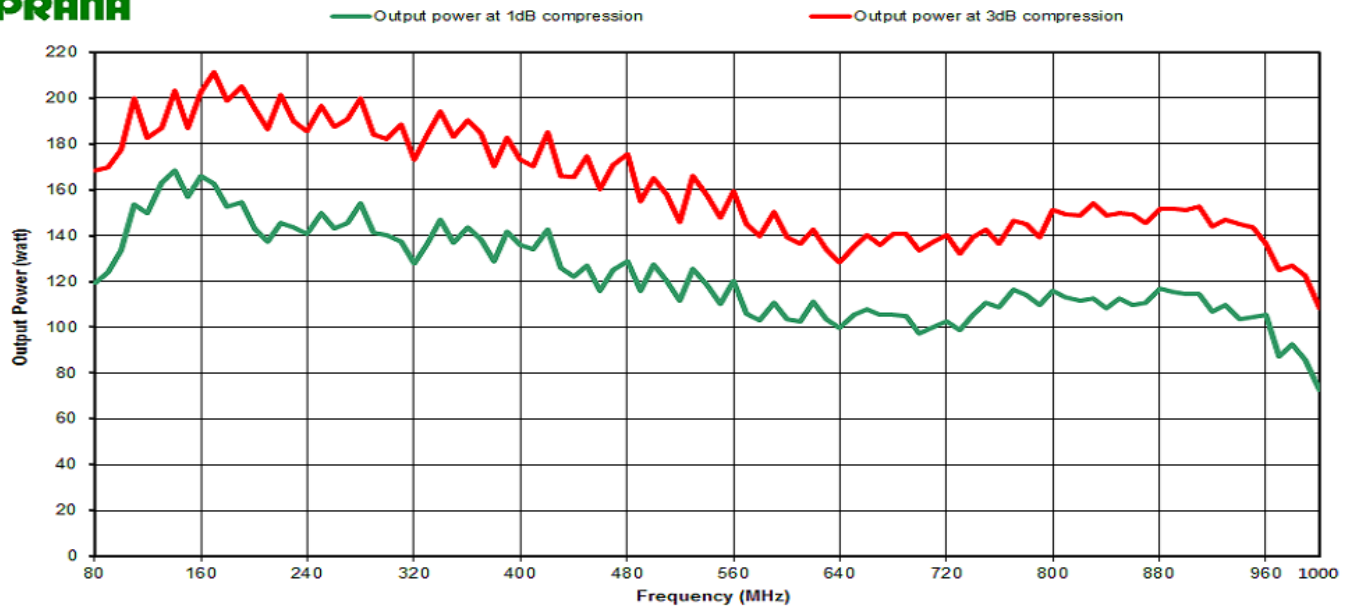
Extra

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

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PRANA



Specifications

Frequency bandwidth	80 MHz - 1000 MHz
Typical output power	100 W
Power at 3 dB compression	120 W min. up to 450 MHz / 80 W min. from 450 MHz to 1000 MHz
Power at 1 dB compression	100 W min. up to 450 MHz / 65 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	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	6.4 A at 110 VAC / 3 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 100 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 100 SC and MT 100 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



MT10029AUG2017 - Electrical and Mechanical Specifications subject to change without notice.

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