

# MT 310

MT Range: 80 MHz - 1000 MHz / 310 W CW



## Prana MT 310

- Class A solid state
- Broadband (instantaneous single band): 80 MHz – 1000 MHz
- Optional frequency extension up to 20 MHz
- Typical output power : 310 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 MT 640 possible (7U)
- 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 310 S : standard amplifier
- MT 310 D amplifier with:
  - Multicolor LCD display with touch panel
  - Digital control
  - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
  - Temperature controlled fans
  - Safety interlock
- MT 310 SC : MT 310 S with
  - Integrated dual directional coupler
- MT 310 DC : MT 310 D with :
  - Integrated dual directional coupler
  - Display of instantaneous incident and reflected power

## MT Range

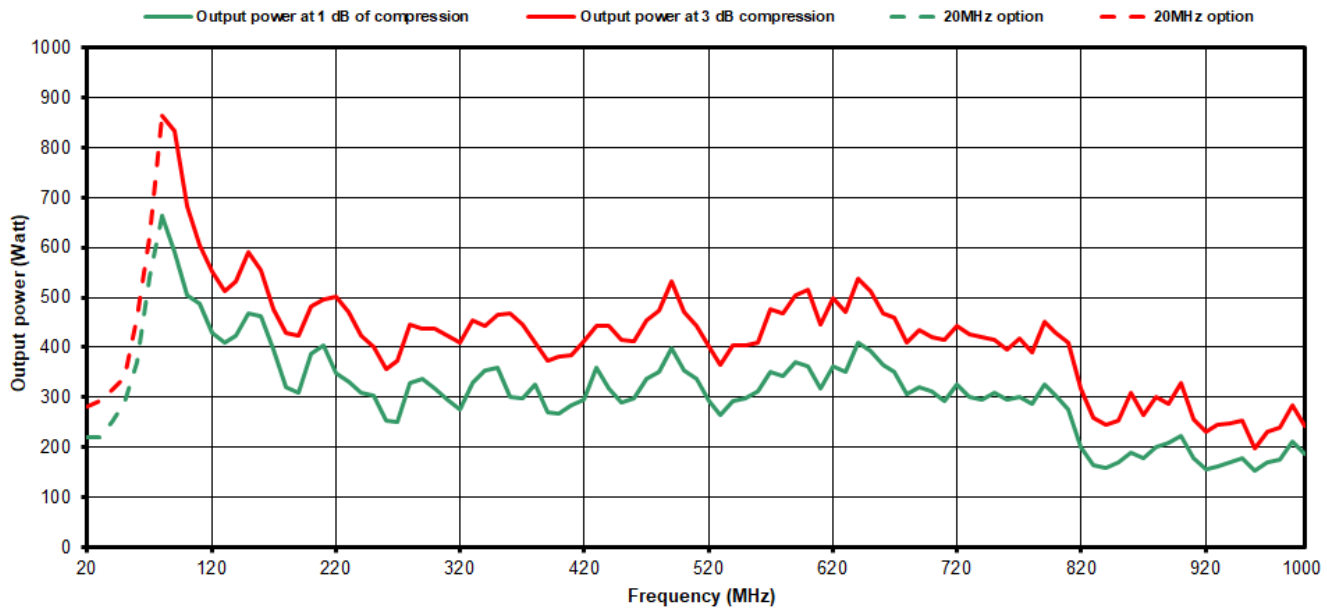
- MT 175 => 175 W CW
- MT 310 => 310 W CW
- MT 640 => 640 W CW
- MT 1150 => 1150 W CW
- MT 1600 => 1600 W CW
- MT 1950 => 1950 W CW
- MT 3400 => 3400 W CW
- MT 4700 => 4700 W CW

## 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 - (20 MHz - 80 MHz optional)
Typical output power	310 W
Power at 3 dB compression	300 W min. up to 750 MHz / 190W min. from 750 MHz to 1000 MHz
Power at 1 dB compression	200 W min. up to 750 MHz / 140 W min. from 750 MHz to 1000 MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression
Class type	Class A
Gain	51 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 / + 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.
Power voltage	90-250 VAC, 47-63 Hz, single phase
Rated current	13.2 A at 110 VAC / 6.3 A at 230 VAC
Dimensions	640 x 450 x 178 mm (4U) / 25.2 x 17.7 x 7 in (4U)
Weight	28 kg / 67 lb

## MT 310 D version :

Safety interlock	Connector type BNC
Digital control	Transistors, power supplies, temperatures and fans
Communication interface	Ethernet, USB, GPIB, RS232
Color LCD display with touch screen	Status, faults, (direct and reverse instantaneous power for DC version)

## MT 310 SC and MT 310 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

MT31030APR2026 - Electrical and Mechanical Specifications subject to change without notice.