

# DT 170/280

DT Range: 9 kHz - 1000 MHz / 170 W CW - 280 W CW



## Prana DT 170/280

- Class A solid state
- Broadband (instantaneous dual band): 9 kHz – 1000 MHz
- Frequency extension between 4 kHz and 9 kHz upon request
- Typical output power :
  - 170 W CW (9 kHz – 200 MHz) and
  - 280 W CW (200 MHz – 1 GHz)
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 100 W and H<-20dBc at 9 kHz
  - P1dB > 110 W and H<-20dBc from 10 kHz to 200 MHz
  - P1dB and H < -20 dBc from 200MHz to 1000MHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- 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

- DT 170/280 D amplifier with:
  - Multicolor LCD display with touch panel
  - Digital control
  - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
  - Temperature controlled fans
  - Safety interlock
- DT 170/280 DC : DT 170/280 D with :
  - Integrated dual directional coupler
  - display of instantaneous incident and reflected power

## DT Range

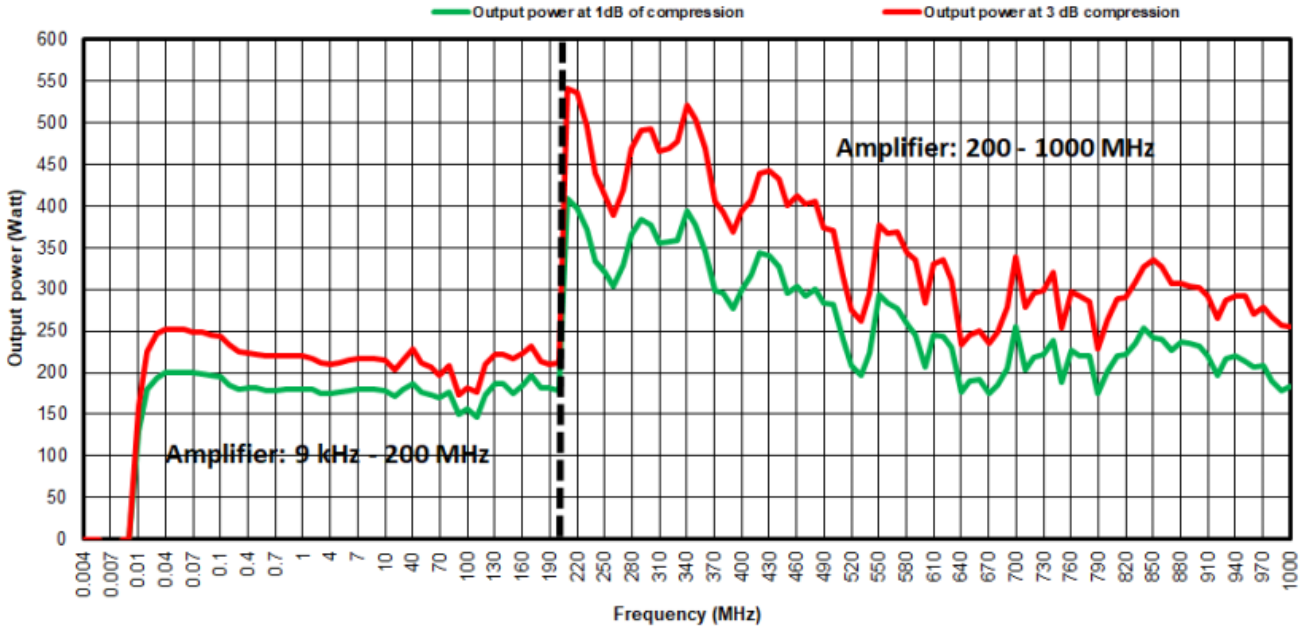
- DT 90/160 => 90 W CW - 160 W CW
- DT 170/160 => 170 W CW - 160 W CW
- DT 170/280 => 170 W CW - 280 W CW
- DT 310/280 => 310 W CW - 280 W CW
- DT 1250-1050 => 1250 W CW - 1050 W CW

## Extra

- External coupler
- Supply and integration inside a cabinet
- Bulk Current Injection + Calibration JIG
- RF Power cable
- Switching unit

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## Specifications

Frequency bandwidth	Low band: 9 kHz - 200 MHz / High band: 200 MHz - 1000 MHz
Typical output power	170 W / 280 W
Power at 3 dB compression	120W min at 9 kHz / 140W min from 10 kHz to 200 MHz / 300W min from 200 MHz to 750 MHz / 180W min from 750 MHz to 1 GHz
Power at 1 dB compression	100W min at 9 kHz / 120 W min from 10 kHz to 200 MHz / 200 W min from 200 MHz to 750 MHz / 140 W min from 750 MHz to 1 GHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression or limit
Class type	Class A
Gain	50 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 / + 35 °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	6.3 A at 230 VAC
Dimensions	640 x 450 x 312 mm (7U) / 25.2 x 17.7 x 12.3 in (7U)
Weight	44 kg / 60 lb

## DT 170/280 DC version :

Integrated bidirectional power coupler	Coupling factor 49 dB typ.
Power coupling connector	Type N fem. (rear panel)
Estimated output power losses due to the coupler	0.6 dB