

# DT 70

DT Range: 10 kHz - 1000 MHz / 70 W CW



## Prana DT 70

- Class A solid state
- Broadband (instantaneous single band): 10 kHz – 1000 MHz
- Typical output power : 70 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 50 W and H<-20 dBc up to 500 MHz and
  - P1dB > 30 W and H<-20 dBc from 500 MHz to 1000 MHz
- 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 70 S : standard amplifier
- DT 70 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- DT 70 SC : DT 70 S with
  - Integrated bidirectional coupler
- DT 70 DC : DT 70 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

## DT Range

- DT 25 => 25 W CW
- DT 70 => 70 W CW
- DT 150 => 150 W CW
- DT 260 => 260 W CW
- DT 800 => 800 W CW

## Extra

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



### Specifications

Frequency bandwidth	10 kHz - 1000 MHz
Typical output power	70 W
Power at 3 dB compression	60 W min up to 500 MHz / 40 W min from 500 MHz to 1000 MHz
Power at 1 dB compression	50 W min up to 500 MHz / 30 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	± 5 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 / + 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	8.1 A at 110 VAC / 3.9 A at 230 VAC
Dimensions	640 x 450 x 178 mm (4U) / 25.2 x 17.7 x 7 in (4U)
Weight	33 kg / 72.7 lb

### DT 70 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)

### DT 70 SC and DT 70 DC versions :

Integrated bidirectional power coupler	Coupling factor 40 dB typ. (SC version) / 49 dB typ. (DC version)
Power coupling connector	Type N fem. (front or rear panel)
Estimated output power losses due to the coupler	0.6 dB