

# DR 1800

DR Range: 9 kHz - 400 MHz / 1800 W CW



## Prana DR 1800

- Class A solid state
- Broadband (instantaneous single band): 9 kHz –400 MHz
- Frequency extension between 4 kHz and 9 kHz upon request
- Typical output power : 1800 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 1500 W and H<-20 dBc from 9 kHz to 50MHz
  - P1dB > 1200 W and H<-20 dBc from 50 MHz to 250MHz
  - P1dB > 500 W and H<-20 dBc from 250 MHz to 400 MHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Reliable, efficient and robust
- 19" Cabinet on wheels
- 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

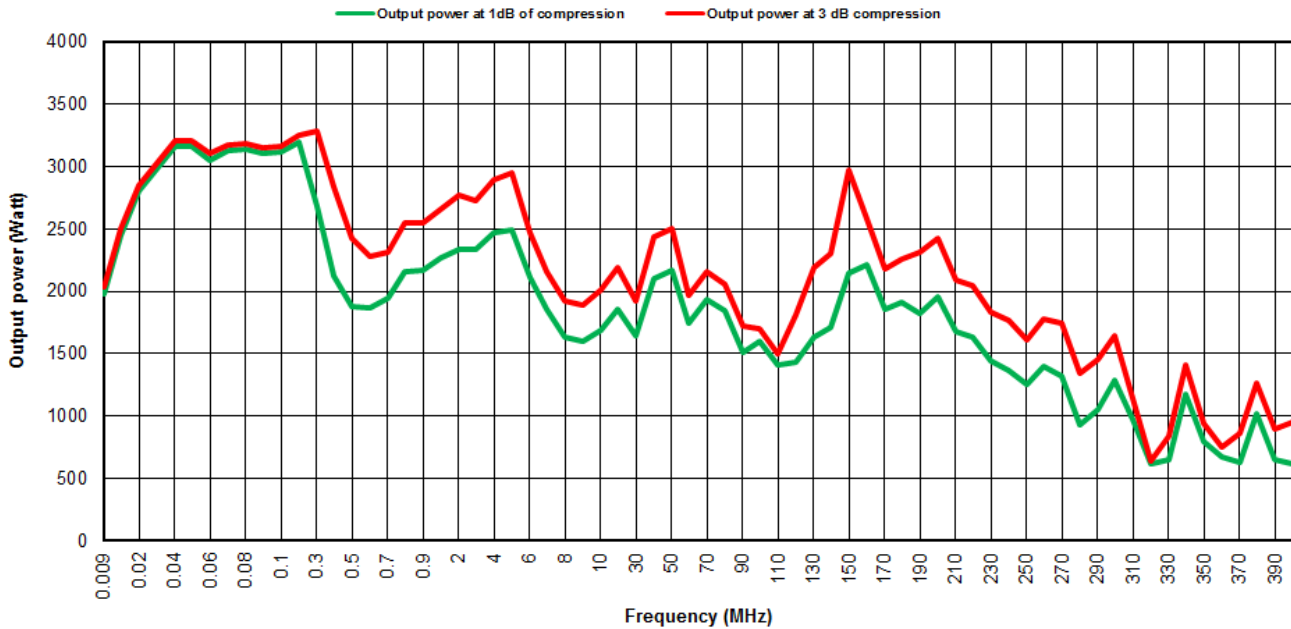
- DR 1800 DC amplifier with:
  - Multicolor LCD display with touch panel
  - Digital control
  - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
  - Temperature controlled fans
  - Safety interlock
  - Integrated dual directional coupler
  - Display of instantaneous incident and reflected power

## DR Range

- DR 75 => 75 W CW
- DR 140 => 140 W CW
- DR 290 => 290 W CW
- DR 540 => 540 W CW
- DR 1100 => 1100 W CW
- DR 1800 => 1800 W CW
- DR 3200 => 3200 W CW

## Extra

- External coupler
- Bulk Current Injection + Calibration JIG
- RF Power cable
- Switching unit



### Specifications

Frequency bandwidth	9 kHz - 400 MHz
Typical output power	1800 W
Minimum power at 3 dB compression	1700W from 9kHz-50MHz/ 1400W 50-250MHz/ 600W 250-400MHz
Minimum power at 1 dB compression	1500W from 9kHz-50MHz/ 1200W 50-250MHz/ 500W 250-400MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	60 dB
Linear power gain flatness	± 2.5 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 7/16 fem. (front or rear panel) – other connector type on request
Integrated bidirectional power coupler	Coupling factor 59 dB typ.
Power coupling connector	Type N fem. (front or rear panel)
Safety interlock	Connector type BNC
Digital control	Transistors, power supplies, temperatures and fans
Mismatch protection	Self limitation for reflected power > 1000 W
Communication interface	Ethernet, USB, GPIB, RS232
Color LCD display with touch screen	Status, faults, direct and reverse instantaneous power
Ambient operating temperature	0 °C / + 35 °C
Room temperature storage	-20 °C / +70 °C
Cooling	Forced air with fan speed control: 480 l/sec max. (self contained fans)
Mains voltage	47-63 Hz, 3 phases (star or delta)
Rated current	10.35 kVA
Dimensions	800 x 840 x 1590 mm (30U) / 31.5 x 33.1 x 62.6 in (30U)
Weight	390 kg / 858 lb