

N-DR 540

DR Range: 9 kHz - 400 MHz / 540 W CW



Prana N-DR 540

- 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 : 540 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 300 W and H<-20 dBc up to 250 MHz and
 - P1dB > 150 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" 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

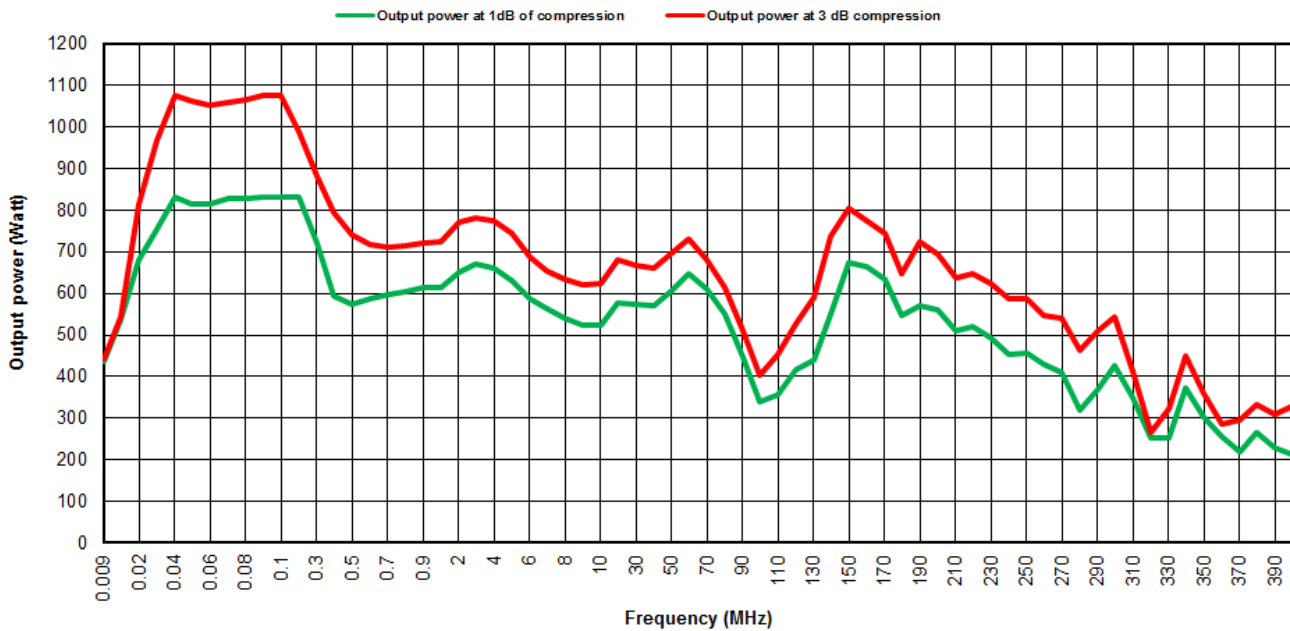
- N-DR 540 D amplifier with:
 - Multicolor LCD display with touch panel
 - Digital control
 - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
 - Temperature controlled fans
 - Safety interlock
- N-DR 540 DC : N-DR 540 D with :
 - Integrated dual directional coupler
 - display of instantaneous incident and reflected power

DR Range

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

Extra

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



Specifications

Frequency bandwidth	9 kHz - 400 MHz
Typical output power	540 W
Power at 3 dB compression	350 W min. up to 250 MHz / 250 W min. from 250 MHz to 400 MHz
Power at 1 dB compression	300 W min. up to 250 MHz / 150 W min. from 250 MHz to 400 MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	54 dB
Linear power gain flatness	± 2.5 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
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	10.9 A at 230 VAC
Dimensions	640 x 450 x 360 mm (8U) / 25.2 x 17.7 x 14.2 in (8U)
Weight	51 kg / 112 lb

N-DR 540 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	0.3 dB