

# N-DP 5000

DP Range: 9 kHz - 250 MHz / 5000 W CW



## Prana N-DP 5000

- Class A solid state
- Broadband (instantaneous single band): 9 kHz – 250 MHz
- Frequency extension between 4 kHz and 9 kHz upon request
- Typical output power : 5000 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB >4000 W and H<-20dBc at 9 kHz
  - P1dB >4500 W and H<-20dBc from 10 kHz to 30 MHz
  - P1dB >2400 W and H<-20dBc from 30 MHz to 250 MHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Reliable, efficient and robust
- 22" 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

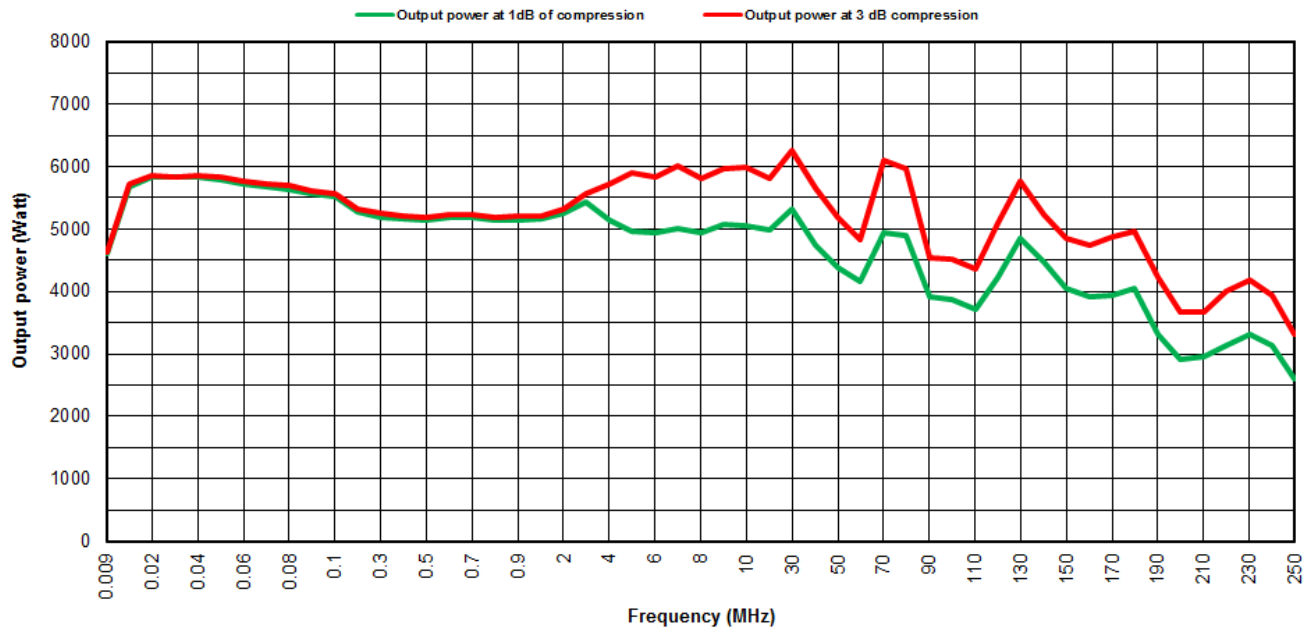
- N-DP 5000 DC amplifier with:
  - Multicolor LCD display with touch panel
  - Digital control
  - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
  - Temperature controlled fans
  - Safety interlock
  - Integrated dual directional coupler
  - Display of instantaneous incident and reflected power

## DP Range

- N-DP 90 => 90 W CW
- N-DP 180 => 180 W CW
- N-DP 340 => 340 W CW
- N-DP 670 => 670 W CW
- N-DP 1350 => 1350 W CW
- N-DP 2500 => 2500 W CW
- N-DP 5000 => 5000 W CW
- N-DP 10000 => 10000 W CW
- N-DP 16000 => 16000 W CW

## Extra

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



## Specifications

Frequency bandwidth	9 kHz - 250 MHz
Typical output power	5000 W
Power at 3 dB compression	4300W min at 9kHz / 5000W min from 10kHz to 30MHz / 3000W min from 30 to 250MHz
Power at 1 dB compression	4000W min at 9kHz / 4500W min from 10kHz to 30MHz / 2400W min from 30 to 250MHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	67 dB
Linear power gain flatness	± 4 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 69 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 > 2000 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: 960 l/sec max. (self contained fans)
Mains voltage	47-63 Hz, 3 phases (star or delta)
Rated current	21 kVA
Dimensions	800 x 840 x 2120 mm (42U) / 31.5 x 33.1 x 83.4 in (42U)
Weight	590 kg / 1300 lb