

DR 110

DR Range: 10 kHz - 400 MHz / 110 W CW



Prana DR 110

- Class A solid state
- Broadband (instantaneous single band): 10 kHz –400 MHz
- Typical output power : 110 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 95 W and H<-20 dBc up to 250 MHz and
 - P1dB > 45 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

- DR 110 S : standard amplifier
- DR 110 D amplifier with:
 - Multicolor LCD display with touch panel
 - Digital control
 - IEEE 488 GPIB, Ethernet, USB, RS232 Communications
 - Temperature controlled fans
 - Safety interlock
- DR 110 SC : DR 110 S with
 - Integrated dual directional coupler
- DR 110 DC : DR 110 D with :
 - Integrated dual directional coupler
 - Display of instantaneous incident and reflected power

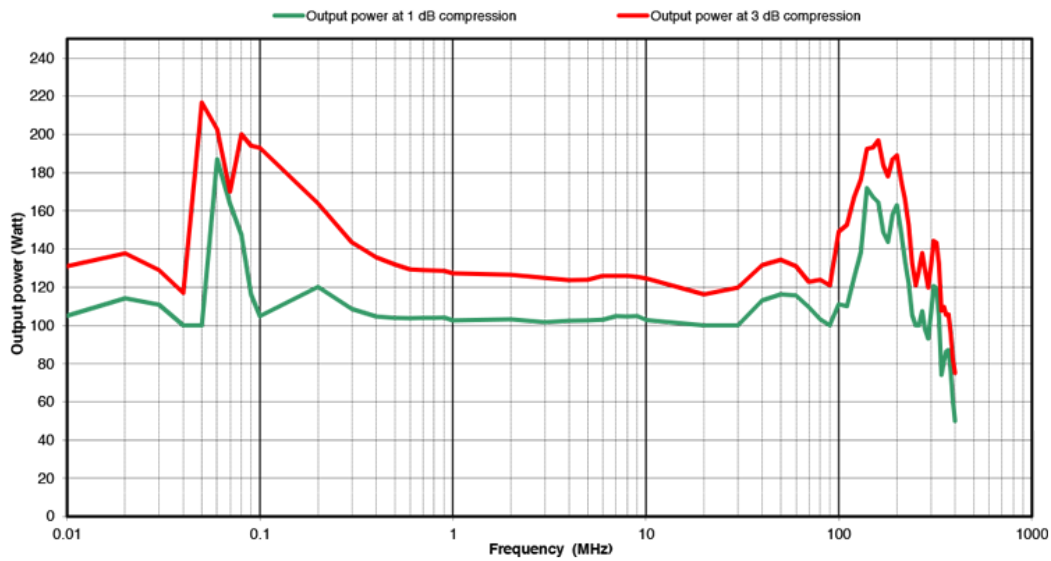
DR Range

- DR 60 => 60 W CW
- DR 110 => 110 W CW
- DR 220 => 220 W CW
- DR 400 => 400 W CW
- DR 600 => 600 W CW
- DR 1200 => 1200 W CW
- DR 2000 => 2000 W CW

Extra

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

DR110 POWER AMPLIFIER 110W / 10 KHz - 400MHz



Specifications

Frequency bandwidth	10 kHz - 400 MHz
Typical output power	110 W
Power at 3 dB compression	110 W min. up to 250 MHz / 70 W min. from 250 MHz to 400 MHz
Power at 1 dB compression	95 W min. up to 250 MHz / 45 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	50 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 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 with fan speed control (for D version): 60 l/sec max. (self contained fans)
Power voltage	90-250 VAC, 47-63 Hz, single phase
Rated current	7.3 A at 110 VAC / 3.5 A at 230 VAC
Dimensions	640 x 450 x 178 mm (4U) / 25.2 x 17.7 x 7 in (4U)
Weight	28 kg / 67 lb

DR 110 D version :

Safety Interlock	Connector type BNC
Digital control	Transistors, power supplies, temperatures and fans
Communication interfaces	Ethernet, USB, GPIB, RS232
Color LCD display with touch screen	Status, faults, (direct and reverse instantaneous power for DC version)

DR 110 SC and DR 110 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	0.3 dB