

SU 175

SU Range: 1 GHz - 2.5 GHz / 175 W CW



Prana SU 175

- Class A solid state
- Broadband (instantaneous single band): 1 GHz – 2.5 GHz
- Typical output power : 175 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 140 W and H < -20 dBc up to 1.6 GHz and
 - P1dB > 120 W and H < -20 dBc from 1.6 GHz to 2.5 GHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to SU 300 possible
- 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

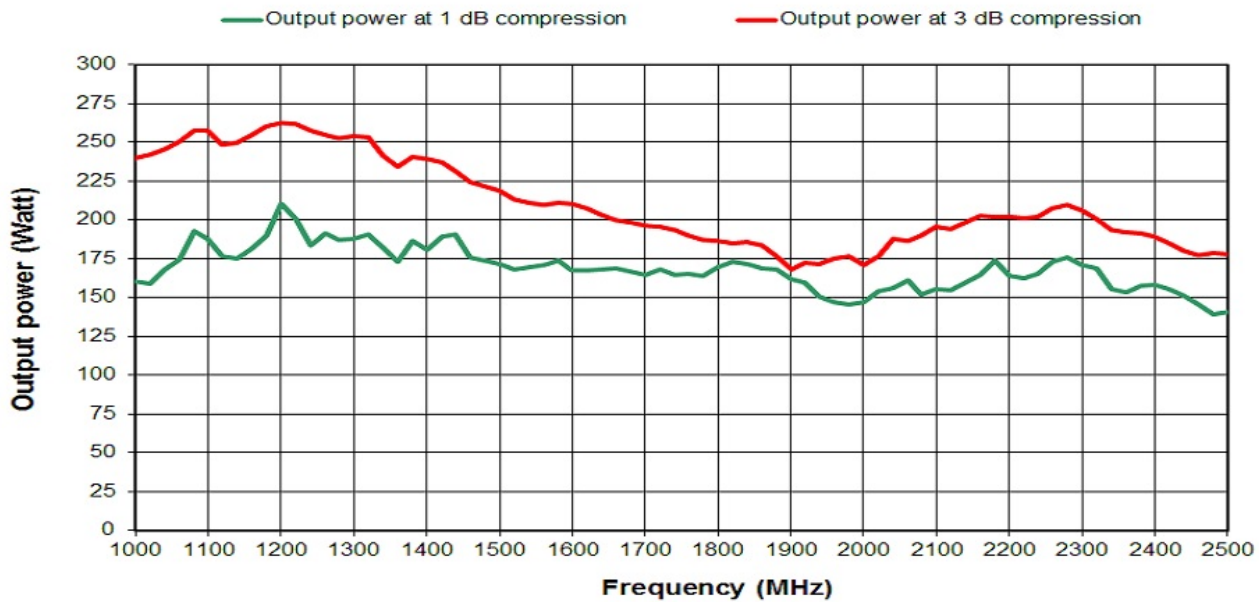
- SU 175 D amplifier with:
 - Display
 - Digital control
 - IEEE 488 GPIB Communication
- SU 175 DC : SU 175 D with :
 - Integrated bidirectional coupler
 - display of instantaneous power

SU Range

- SU 50 => 50 W CW
- SU 90 => 90 W CW
- SU 175 => 175 W CW
- SU 300 => 300 W CW
- SU 600 => 600 W CW
- SU 1200 => 1200 W CW

Extra

- External coupler
- Supply and integration inside a cabinet
- RF Power cable
- Switching unit



Specifications

Frequency bandwidth	1 GHz - 2.5 GHz
Typical output power	175 W
Power at 3 dB compression	175 W min. up to 1.6 GHz / 155 W min. from 1.6 GHz to 2.5 GHz
Power at 1 dB compression	140 W min. up to 1.6 GHz / 120 W min. from 1.6 GHz to 2.5 GHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	52 dB
Linear power gain flatness	± 4 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 and internal temperature
Communication interface	IEEE 488
4 lines digital display	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: 120 l/sec max. (self contained fans)
Power voltage	200-250 VAC, 47-63 Hz, single phase
Rated current	4.8 A at 230 VAC
Dimensions	640 x 450 x 312 mm (7U) / 25.2 x 17.7 x 12.3 in (7U)
Weight	33 kg / 73 lb

SU 175 DC version :

Integrated bidirectional power coupler	Coupling factor 49 dB typ.
Power coupling connector	Type N fem (front or rear panel)
Estimated output power losses due to the coupler	0.3 dB