

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

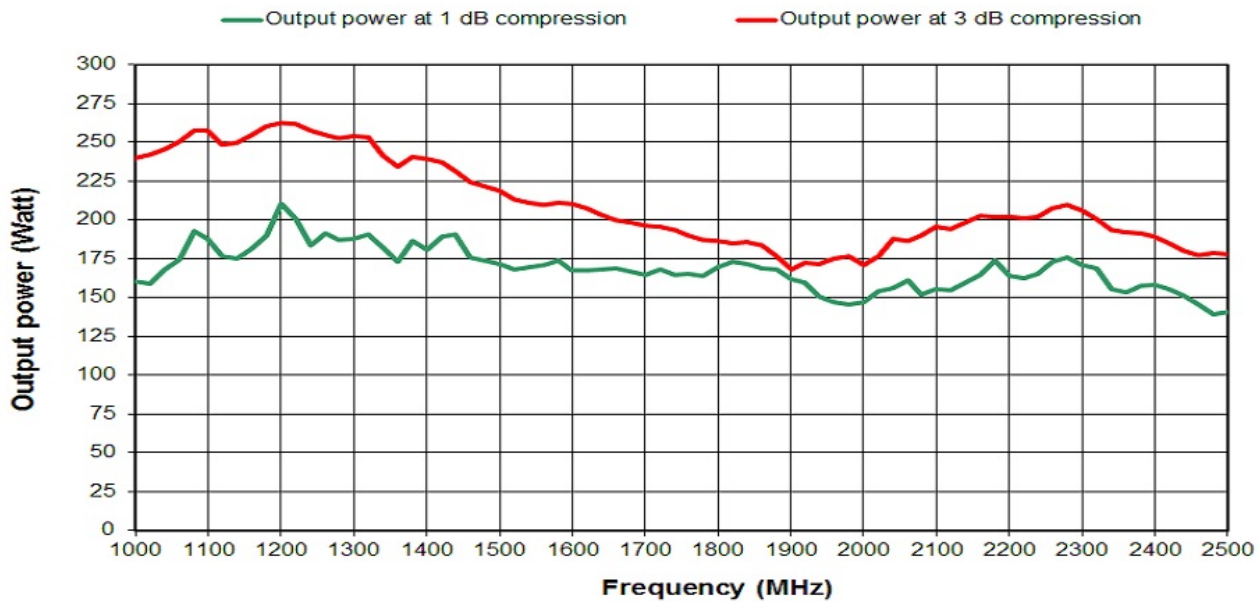
- SU 175 D amplifier with:
 - Display
 - Digital control
 - IEEE 488 GPIB Communication
- SU 175 DC : SU 175 D with :
 - Integrated bidirectional coupler
 - display of instantaneous power

SU Range

- SU 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

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|-------------------------------|---|
| 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 59 dB typ. |
| Power coupling connector | Type N fem (front or rear panel) |
| Estimated output power losses due to the coupler | 0.3 dB |