

# SU 300

SU Range: 1 GHz - 2.5 GHz / 300 W CW



## Prana SU 300

- Class A solid state
- Broadband (instantaneous single band): 1 GHz – 2.5 GHz
- Typical output power : 300 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 270 W and H < -20 dBc up to 1.6 GHz and
  - P1dB > 240 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 600 possible (18U)
- 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

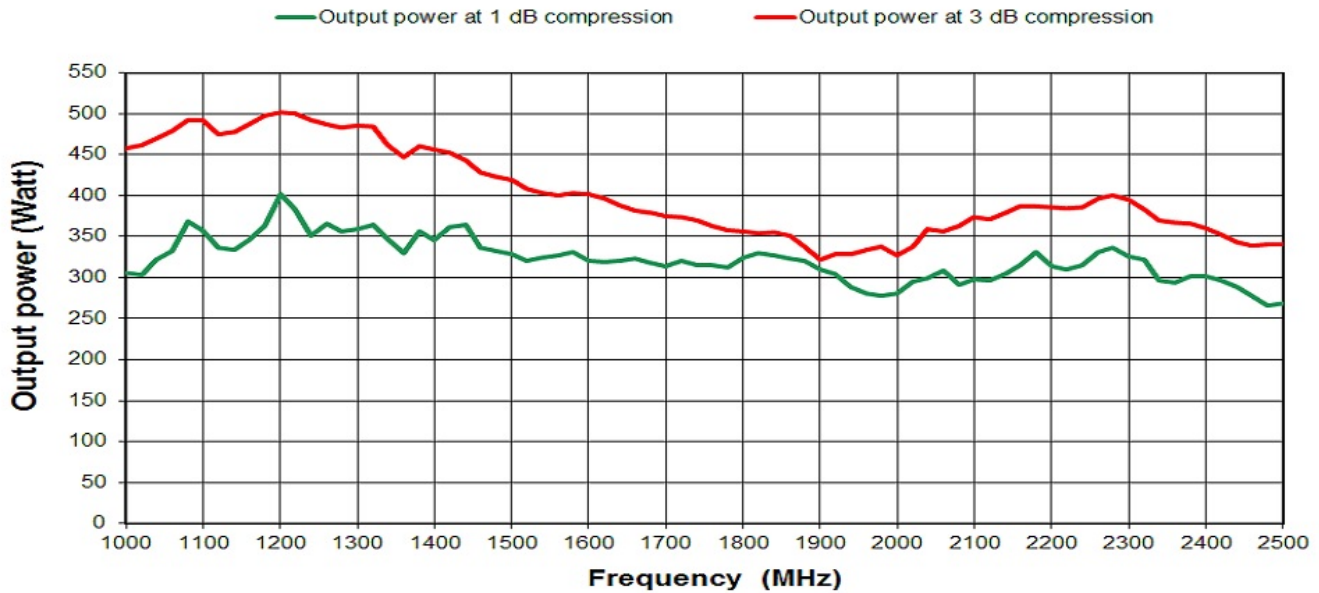
- SU 300 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- SU 300 DC : SU 300 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

## 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	300 W
Power at 3 dB compression	300 W min. up to 1.6 GHz / 280 W min. from 1.6 GHz to 2.5 GHz *
Power at 1 dB compression	270 W min. up to 1.6 GHz / 240 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	54 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
Ambient operating temperature	0 °C / + 35 °C
4 lines digital display	Status, faults, (direct and reverse instantaneous power for DC version)
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	8.7 A at 230 VAC
Dimensions	640 x 450 x 312 mm (7U) / 25.2 x 17.7 x 12.3 in (7U)
Weight	45 kg / 99 lb

## SU 300 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* => take account these power losses for the min output power