PRÂNA

Broadband power amplifiers
Made in France

TU 100

TU series: 0.8 GHz – 2 GHz
100 W CW

www.prana-rd.com

Prana TU 100:

- Class A solid state
- Broadband (instantaneous single band): 0.8 GHz – 2 GHz
- Typical output power : 100 W CW
  Linear output power (1 dB compression) guaranted with harmonics <-20 dBc:
  - P1dB > 60 W and H < -20 dBc up to 1 GHz
  - P1dB > 75 W and H < -20 dBc from 1 GHz to 2 GHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to TU 200 possible (6U)
- 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:

- **TU 100 S** : standard amplifier
- **TU 100 D** : TU 100 S with:
  - ⇨ Display
  - ⇨ Digital control
  - ⇨ IEEE 488 GPIB Communication
- **TU 100 SC** : TU 100 S with :
  - ⇨ Integrated bidirectional coupler
- **TU 100 DC** : TU 100 D with :
  - ⇨ Integrated bidirectional coupler
  - ⇨ display of instantaneous power

TU series:

- TU 16 => 16 W CW
- TU 30 => 30 W CW
- TU 60 => 60 W CW
- TU 200 => 200 W CW

Prana additional options:

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

Photo: TU 100 D

Specifications

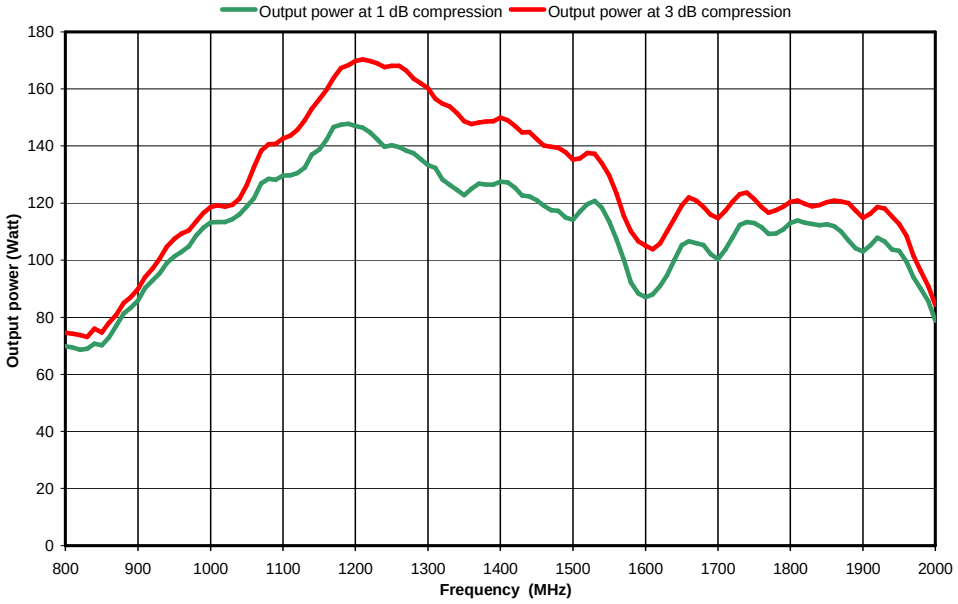
Frequency bandwidth	0.8 GHz – 2 GHz
Typical output power	100 W
Power at 3 dB compression	65 W min. up to 1 GHz / 90 W min. from 1 GHz to 2 GHz *
Power at 1 dB compression	60 W min. up to 1 GHz / 75 W min. from 1 GHz to 2 GHz *
Harmonics distortion	H2,H3 < -20 dBc for output power at 1 dB compression
Class type	Class A
Gain	50 dB
Linear power gain flatness	± 3.5 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: 60 l/sec max. (self contained fans)
Power voltage	90-250 VAC, 47-63 Hz, single phase
Rated current	4.5 A at 110 VAC / 2.1 A at 230 VAC
Dimensions	630 x 450 x 178 mm (4U) / 24.8 x 17.7 x 7 in (4U)
Weight	37 kg / 81 lb

TU 100 D version

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)

TU 100 SC and TU 100 DC versions

Integrated bidirectional power coupler	Coupling factor 40 dB (SC version) / 49 dB (DC version) ± 0.4 dB
Power coupling connector	Type N fem. (front or rear panel)
Estimated output power losses due to the coupler	0.3 dB



* Except DC version

Electrical and Mechanical Specifications subject to change without notice.