

TU 100

TU Range: 0.8 GHz - 2 GHz / 100 W CW



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) guaranteed with harmonics <-20 dBc:
 - P1dB > 60 W and H < -20 dBc up to 1 GHz and
 - 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 amplifier 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

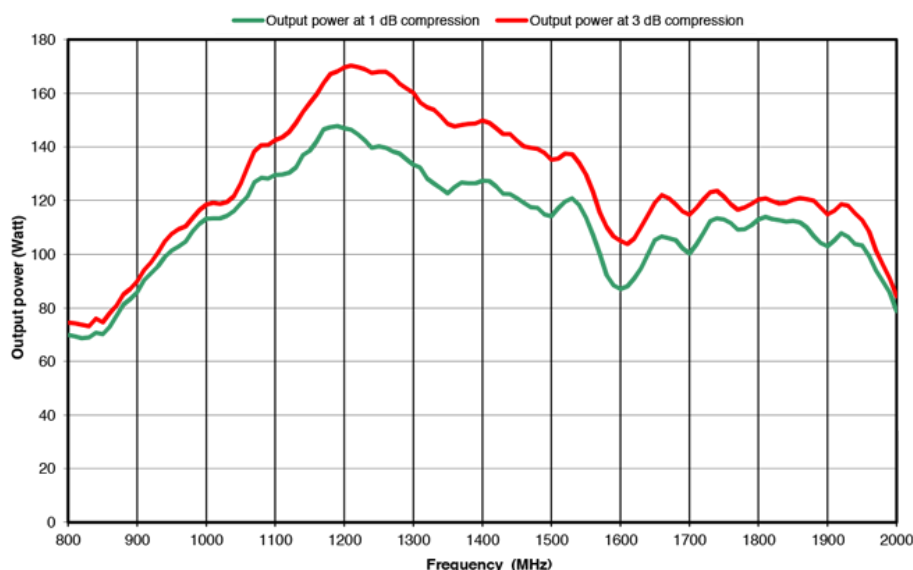
TU Range

- TU 16 => 16 W CW
- TU 30 => 30 W CW
- TU 60 => 60 W CW
- TU 100 => 100 W CW
- TU 200 => 200 W CW

Extra

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

TU100 POWER AMPLIFIER 100W / 800 MHz - 2000 MHz



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 the output power at 1 dB compression limit
Class type	Class A
Gain	50 dB
Linear power gain flatness	± 4 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	640 x 450 x 178 mm (4U) / 25.2 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 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