SX 120/100

SX Range: 0.8 GHz - 6 GHz / 120 W CW - 100 W CW



Prana SX 120/100

- Class A solid state
- Broadband (instantaneous dual band): 0.8 GHz – 6 GHz
- Typical output power :
  - 120 W CW (0.8 – 3.2 GHz) and
  - 100 W CW (3.2 – 6 GHz)
- Linear output power guaranteed with harmonics < -20 dBc
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to SX220/100
- 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

- SX 120/100 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- SX 120/100 DC : SX 120/100 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

SX Range

- SX 20/15 => 20 W CW - 15 W CW
- SX 40/15 => 40 W CW - 15 W CW
- SX 40/30 => 40 W CW - 30 W CW
- SX 70/15 => 70 W CW - 15 W CW
- SX 70/30 => 70 W CW - 30 W CW
- SX 70/55 => 70 W CW - 55 W CW
- SX 120/30 => 120 W CW - 30 W CW
- SX 120/55 => 120 W CW - 55 W CW
- SX 120/100 => 120 W CW - 100 W CW
- SX 220/55 => 220 W CW - 55 W CW
- SX 220/100 => 220 W CW - 100 W CW
- SX 220/150 => 220 W CW - 150 W CW

Extra

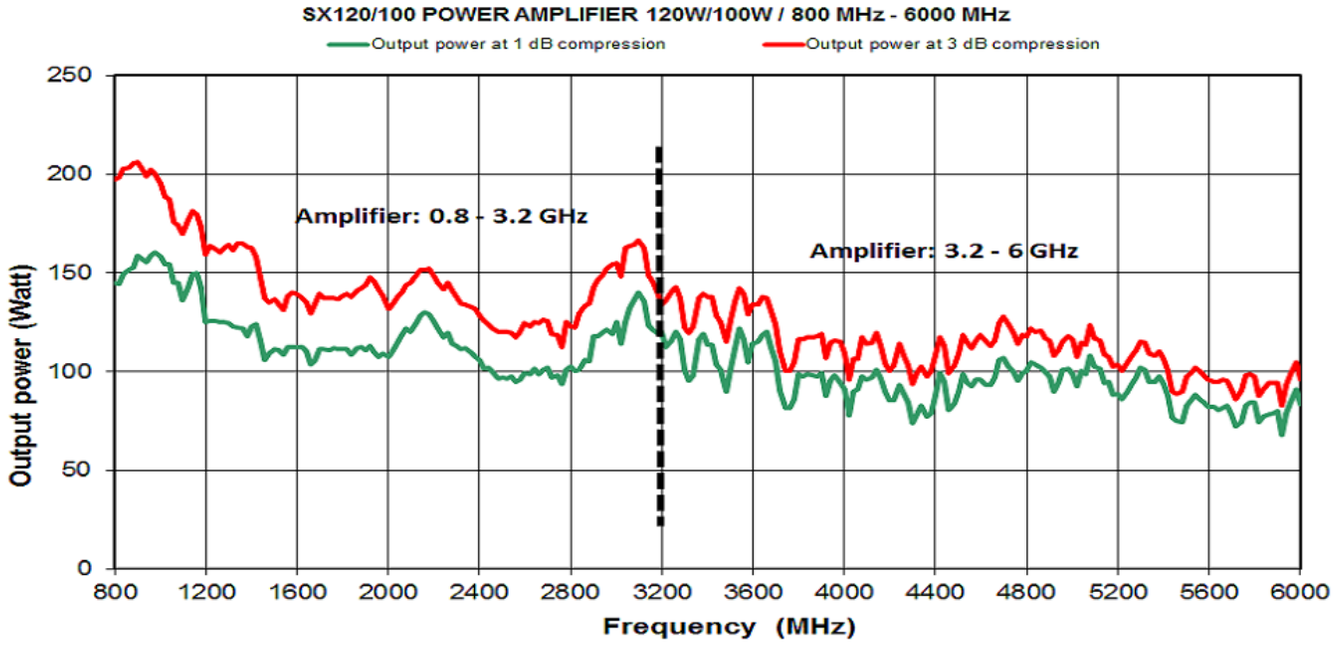
- External coupler
- RF Power cable

SX120/10005JUN2023 - Electrical and Mechanical Specifications subject to change without notice.

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SX 120/100

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Specifications

Frequency bandwidth	0.8 GHz - 6 GHz
Typical output power	120 W / 100 W
Power at 3 dB compression	100 W min. up to 3.2 GHz / 75 W min. up to 6 GHz
Power at 1 dB compression	75 W min. up to 3.2 GHz / 60 W min. up to 6 GHz
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression
Class type	Class A
Gain	50 dB
Linear power gain flatness	± 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
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: 240 l/sec max. (self contained fans)
Power voltage	200-250 VAC, 47-63 Hz, single phase
Rated current	6.6 A at 230 VAC
Dimensions	600 x 840 x 1050 mm (18U) / 23.6 x 33.1 x 41.3 in (18U)
Weight	160 kg / 352 lb

SX 120/100 DC version :

Integrated bidirectional power coupler	Coupling factor 60 dB typ.
Power coupling connector	Type N fem. (front or rear panel)
Estimated output power losses due to the coupler	0.5 dB

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Made in France