

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 (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 75 W and H < -20 dBc up to 3.2 GHz and
 - P1dB > 60 W and H < -20 dBc from 3.2 GHz to 6 GHz
- 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 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 220/150 => 220 W CW - 150 W CW
- SX 220/100 => 220 W CW - 100 W CW

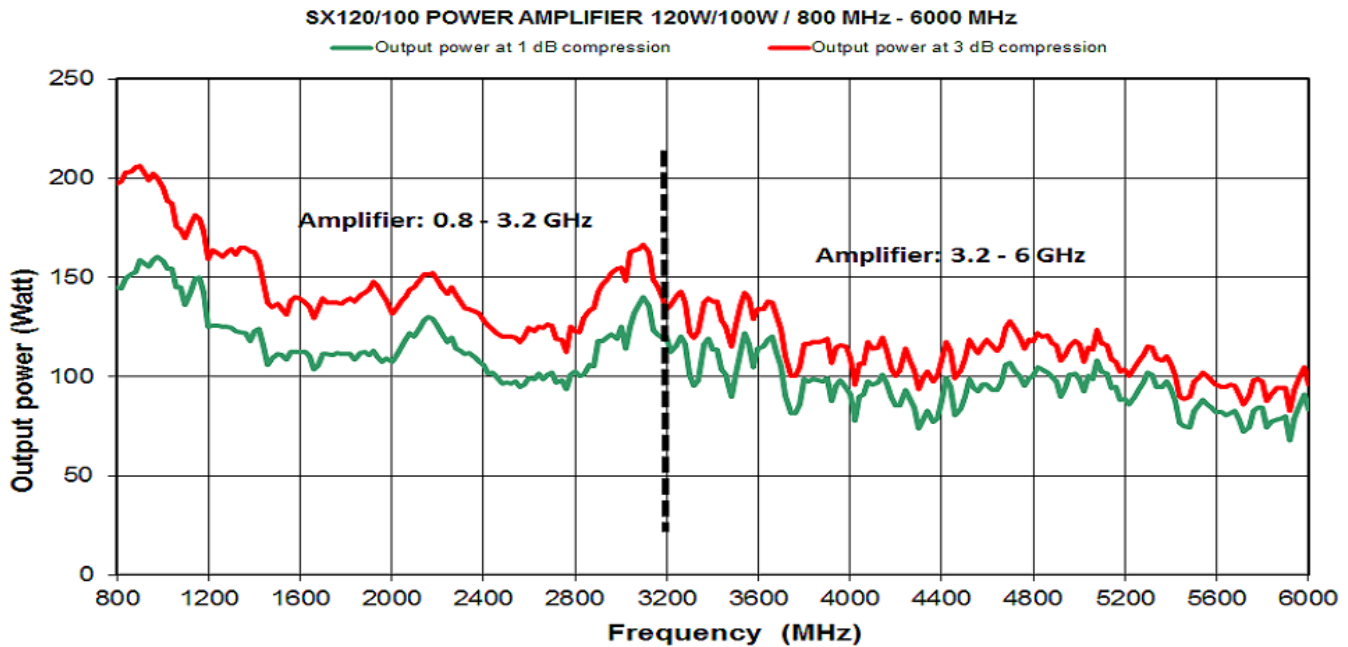
Extra

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

SX120/10024APR2017 - Electrical and Mechanical Specifications subject to change without notice.

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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 limit |
| Class type | Class A |
| Gain | 50 dB |
| Linear power gain flatness | ± 5 dB max |
| Mismatch tolerance | infinite without damage |
| Input impedance | 50 ohms / VSWR: 2:1 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: 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 49 dB typ. |
| Power coupling connector | Type N fem. (front or rear panel) |
| Estimated output power losses due to the coupler | 0.5 dB * => take account these power losses for the min output power |