

Prana SV 20:

- Class A solid state
- Broadband (instantaneous single band): 0.8 GHz – 3.2 GHz
- Typical output power : 20 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 15 W and H < -20 dBc up to 2 GHz
 - P1dB > 12 W and H < -20 dBc from 2 GHz to 3.2 GHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- 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:

- **SV 20 S** : standard amplifier
- **SV 20 D** : SV 20 S with:
 - ⇒ Display
 - ⇒ Digital control
 - ⇒ IEEE 488 GPIB Communication
- **SV 20 SC** : SV 20 S with :
 - ⇒ Integrated bidirectional coupler
- **SV 20 DC** :SV 20 D with :
 - ⇒ Integrated bidirectional coupler
 - ⇒ display of instantaneous power

SV series:

- SV 40 => 40 W CW
- SV 70 => 70 W CW
- SV 120 => 120 W CW
- SV 220 => 220 W CW

Prana additional options:

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



Photo: SV 20 D

Specifications

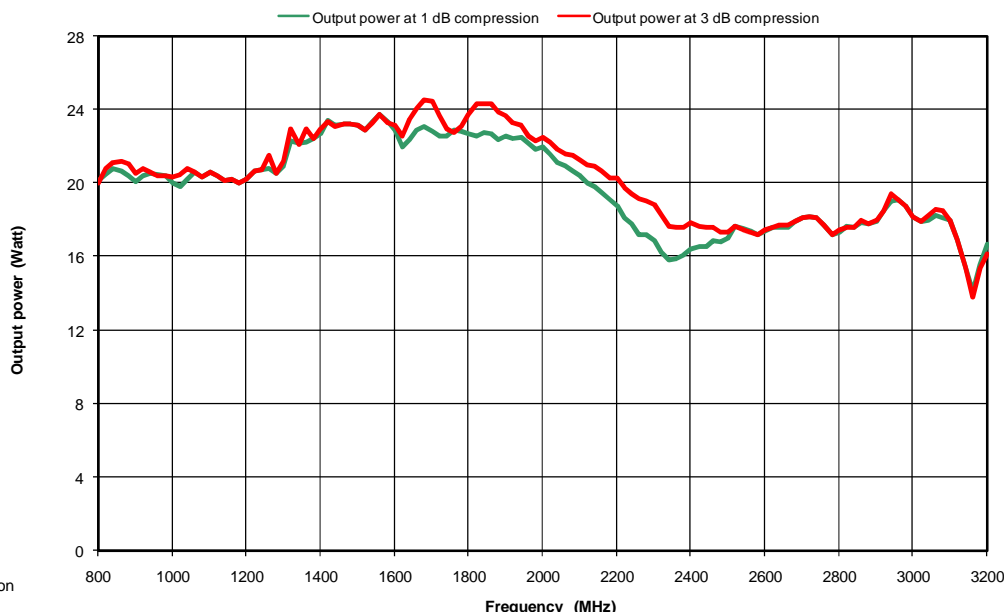
Frequency bandwidth.....	0.8 GHz – 3.2 GHz
Typical output power.....	20 W
Power at 3 dB compression.....	17 W min. up to 2 GHz / 13 W min. from 2 GHz to 3.2 GHz *
Power at 1 dB compression.....	15 W min. up to 2 GHz / 12 W min. from 2 GHz to 3.2 GHz *
Harmonics distortion.....	H2,H3 < -20 dBc for output power at 1dB compression
Class type.....	Class A
Gain.....	41 dB
Linear power gain flatness.....	± 3.5 dB max (up to 3 GHz)
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 panel) – other connector type on request
RF output connector.....	Type N fem. (front 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.....	1.8 A at 110 VAC / 0.9 A at 230 VAC
Dimensions.....	630 x 450 x 89 mm (2U) / 24.8 x 17.7 x 3.5 in (2U)
Weight.....	13 kg / 28.6 lb

SV 20 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)

SV 20 SC and SV 20 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. (rear panel)
Estimated output power losses due to the coupler.....	0.3 dB



* Except DC version