

# SV 20

SV Range: 0.8 GHz - 3.2 GHz / 20 W CW



## 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 > 14 W and H < -20 dBc
- 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 amplifier 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

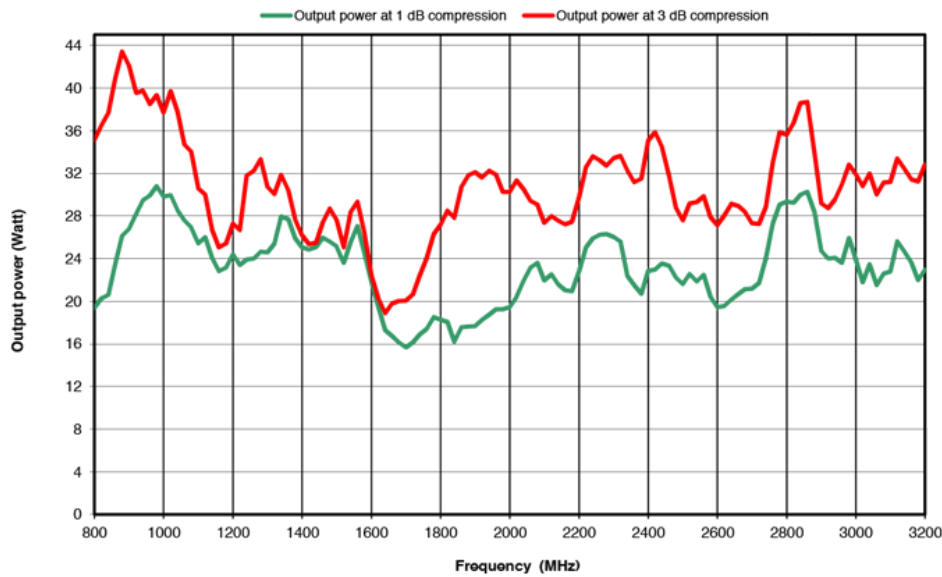
## SV Range

- SV 20 => 20 W CW
- SV 40 => 40 W CW
- SV 70 => 70 W CW
- SV 120 => 120 W CW
- SV 220 => 220 W CW
- SV 450 => 450 W CW
- SV 1000 => 1000 W CW

## Extra

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

SV20 POWER AMPLIFIER 20W / 800 MHz - 3200 MHz



## Specifications

Frequency bandwidth	0.8 GHz - 3.2 GHz
Typical output power	20 W
Power at 3 dB compression	17 W min *
Power at 1 dB compression	14 W min *
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	43 dB
Linear power gain flatness	± 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 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: 20 l/sec max. (self contained fans)
Power voltage	90-250 VAC, 47-63 Hz, single phase
Rated current	2.2 A at 110 VAC / 1.0 A at 230 VAC
Dimensions	640 x 450 x 89 mm (2U) / 25.2 x 17.7 x 3.5 in (2U)
Weight	12 kg / 26.5 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 50 dB typ. (SC version) / 59 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