

# 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

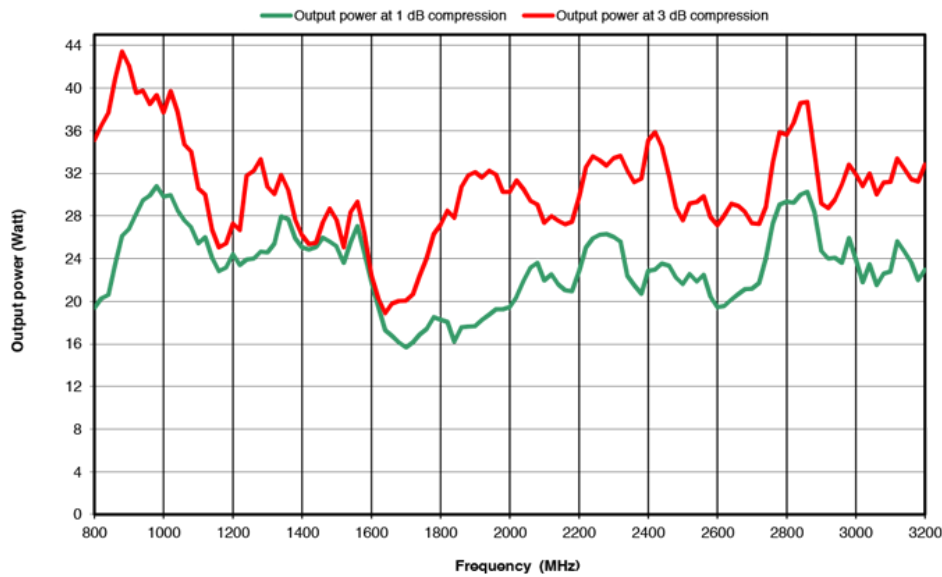
## SV Range

- 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 |