

# SV 220

SV Range: 0.8 GHz - 3.2 GHz / 220 W CW



## Prana SV 220

- Class A solid state
- Broadband (instantaneous single band): 0.8 GHz – 3.2 GHz
- Typical output power : 220 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 180 W and H < -20 dBc up to 2 GHz and
  - P1dB > 160 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
- Upgradable to SV 450 possible (18U)
- 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 220 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- SV 220 DC : SV 220 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

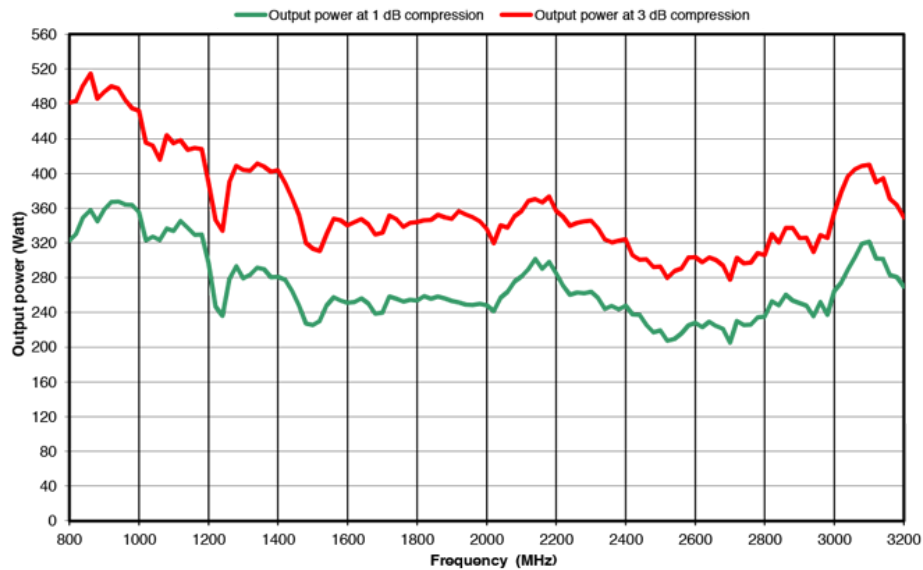
## SV Range

- 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

SV220 POWER AMPLIFIER 220W / 800 MHz - 3200 MHz



### Specifications

|                               |   |
|-------------------------------|---|
| Frequency bandwidth           | 0.8 GHz - 3.2 GHz   |
| Typical output power          | 220 W   |
| Power at 3 dB compression     | 200 W min. up to 2 GHz / 180 W min. from 2 GHz to 3.2 GHz               |
| Power at 1 dB compression     | 180 W min. up to 2 GHz / 160 W min. from 2 GHz to 3.2 GHz               |
| Harmonics distortion          | H2,H3 < -20 dBc for the output power at 1 dB compression limit          |
| Class type                    | Class A   |
| Gain                          | 54 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: 120 l/sec max. (self contained fans)                        |
| Power voltage                 | 200-250 VAC, 47-63 Hz, single phase                                     |
| Rated current                 | 8.7 A at 230 VAC  |
| Dimensions                    | 640 x 450 x 312 mm (7U) / 25.2 x 17.7 x 12.3 in (7U)                    |
| Weight                        | 45 kg / 99 lb   |

### SV 220 DC version :

|  |                            |
|--|----------------------------|
| Integrated bidirectional power coupler           | Coupling factor 59 dB typ. |
| Power coupling connector                         | Type N fem. (rear panel)   |
| Estimated output power losses due to the coupler | 0.3 dB                     |