

SV 70

SV Range: 0.8 GHz - 3.2 GHz / 70 W CW



Prana SV 70

- Class A solid state
- Broadband (instantaneous single band): 0.8 GHz – 3.2 GHz
- Typical output power : 70 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
 - P1dB > 70 W and H < -20 dBc up to 2 GHz and
 - P1dB > 40 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 120 possible (7U)
- 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 70 S : standard amplifier
- SV 70 D amplifier with:
 - Display
 - Digital control
 - IEEE 488 GPIB Communication
- SV 70 SC : SV 70 S with
 - Integrated bidirectional coupler
- SV 70 DC : SV 70 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

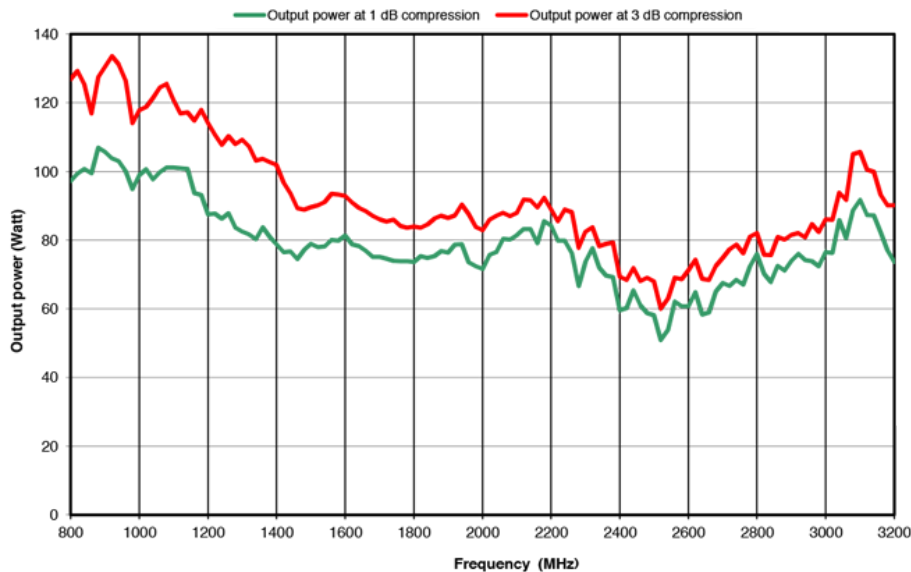
Extra

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

SV7025SEP2014 - Electrical and Mechanical Specifications subject to change without notice.

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SV70 POWER AMPLIFIER 70W / 800 MHz - 3200 MHz



Specifications

Frequency bandwidth	0.8 GHz - 3.2 GHz
Typical output power	70 W
Power at 3 dB compression	70 W min. up to 2 GHz / 50 W min. from 2 GHz to 3.2 GHz *
Power at 1 dB compression	60 W min. up to 2 GHz / 40 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	47 dB
Linear power gain flatness	± 5 dB max
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: 60 l/sec max. (self contained fans)
Power voltage	90-250 VAC, 47-63 Hz, single phase
Rated current	4.5 A at 110 VAC / 2.2 A at 230 VAC
Dimensions	640 x 450 x 178 mm (4U) / 25.2 x 17.7 x 7 in (4U)
Weight	25 kg / 55 lb

SV 70 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 70 SC and SV 70 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