

# SW 18

SW Range: 0.8 GHz - 4 GHz / 18 W CW



## Prana SW 18

- Class A solid state
- Broadband (instantaneous single band): 0.8 GHz – 4 GHz
- Typical output power : 18 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 13 W and H < -20 dBc up to 2.5 GHz and
  - P1dB > 12 W and H < -20 dBc from 2.5 GHz to 4 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

- SW 18 S : standard amplifier
- SW 18 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- SW 18 SC : SW 18 S with
  - Integrated bidirectional coupler
- SW 18 DC : SW 18 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

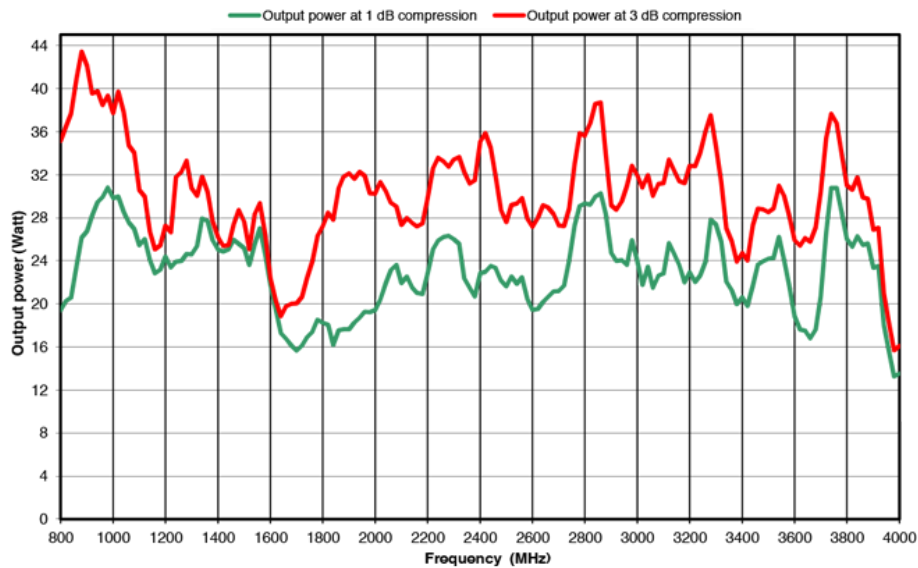
## SW Range

- SW 18 => 18 W CW
- SW 35 => 35 W CW
- SW 65 => 65 W CW
- SW 100 => 100 W CW
- SW 200 => 200 W CW
- SW 420 => 420 W CW
- SW 800 => 800 W CW

## Extra

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

## SW18 POWER AMPLIFIER 18W / 800 MHz - 4 GHz



### Specifications

Frequency bandwidth	0.8 GHz - 4 GHz
Typical output power	18 W
Power at 3 dB compression	15 W min. up to 2.5 GHz / 13 W min. from 2.5 GHz to 4 GHz
Power at 1 dB compression	13 W min. up to 2.5 GHz / 12 W min. from 2.5 GHz to 4 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: 2:1 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
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 lb

### SW 18 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)

### SW 18 SC and SW 18 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	0.4 dB