

# SW 420

SW Range: 0.8 GHz - 4 GHz / 420 W CW



## Prana SW 420

- Class A solid state
- Broadband (instantaneous single band): 0.8 GHz – 4 GHz
- Typical output power : 420 W CW
- Linear output power (1 dB compression) guaranteed with harmonics <-20 dBc:
  - P1dB > 300 W and H < -20 dBc up to 3 GHz and
  - P1dB > 250 W and H < -20 dBc from 3 GHz to 4 GHz
- Air cooling: self contained fans
- Can operate in full mismatch conditions without damage
- Upgradable to SW 800 possible (30U)
- Reliable, efficient and robust
- 19" cabinet on wheels
- 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 420 D amplifier with:
  - Display
  - Digital control
  - IEEE 488 GPIB Communication
- SW 420 DC : SW 420 D with :
  - Integrated bidirectional coupler
  - display of instantaneous power

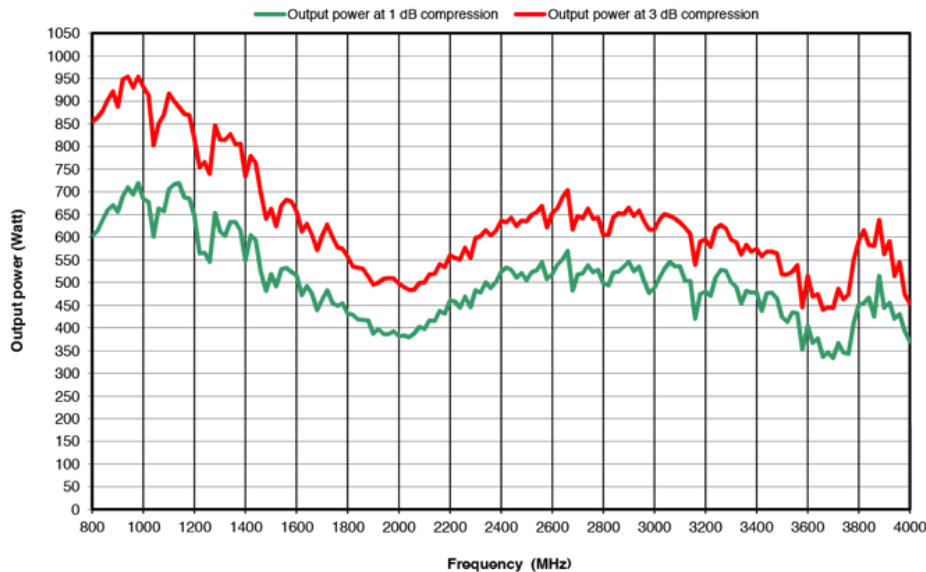
## SW Range

- 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

SW420 POWER AMPLIFIER 420W / 800 MHz - 4 GHz



## Specifications

Frequency bandwidth	0.8 GHz - 4 GHz
Typical output power	420 W
Power at 3 dB compression	400 W min. up to 3 GHz / 300 W min. from 3 GHz to 4 GHz *
Power at 1 dB compression	300 W min. up to 3 GHz / 250 W min. from 3 GHz to 4 GHz *
Harmonics distortion	H2,H3 < -20 dBc for the output power at 1 dB compression limit
Class type	Class A
Gain	57 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 7/16 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: 240 l/sec max. (self contained fans)
Mains voltage	47-63 Hz, 3 phases (star or delta)
Rated current	4 kVA
Dimensions	600 x 840 x 1050 mm (18U) / 23.6 x 33.1 x 41.3 in (18U)
Weight	230 kg / 506 lb

## SW 420 DC version :

Integrated bidirectional power coupler	Coupling factor 69 dB typ.
Power coupling connector	Type N fem. (rear panel)
Estimated output power losses due to the coupler	0.4 dB * => take account these power losses for the min output power