# 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) guaranted 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



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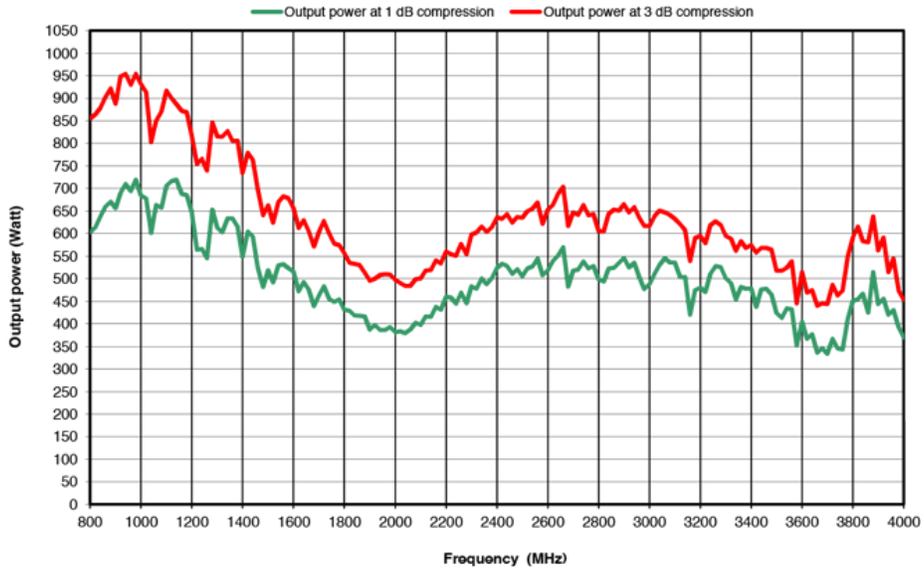
SW420 POWER AMPLIFIER 420W / 800 MHz - 4 GHz




## 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: 2:1max |
| 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 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 |



SW42012DEC2014 - Electrical and Mechanical Specifications subject to change without notice.