

HIGH POWER DENSITY MULTI OUTPUT SMPS Model RHPS231



776 Watt Output Power 1.5U x 3U Form Factor Multiple Output Wide Input Voltage Range No Minimum Load required Stand-by Output Voltage 5V@2.5A Remote sense Active Power Factor Corrector Fan Status Monitoring Multiphase buck synchronous rectification Input harmonics conform to EN61000-3-2 and EN6100(RoHS-6 Compliant (Directive 2002/95/EC)



Applications

Test & Measurement Equipment (PXI Modular Instruments) Industrial Equipment



Input Specification

Input Voltage Input Frequency Maximum Input Current Maximum Inrush Current Power Factor Corrector Input Protection

110 Vac, 230 Vac (90 Vac to 264 Vac Full Range), Single Phase 50 Hz, 60 Hz, 400 Hz (47 Hz to 440 Hz) 13 A @ 90 Vac 40 A peak ≥0.95 (Full Load @ 230 Vac) Internal fuse, 16 A

Output Specification



Output Power (max) Output Voltage **Output Current** Voltage Regulation Ripple

| +3.3V | |
|-------|--|

776W

| +3.3V | +5V | +12V | -12V | +12VFan | 5Vaux | |
|--|------------|------------|------------|------------|------------|--|
| 0 to 61 A | 0 to 56 A* | 0 to 45 A* | 0 to 4.0 A | 0 to 6.0 A | 0 to 2.5 A | |
| ±2.5% | ±2.5% | ±2.5% | ±2.5% | ±5% | ±5% | |
| <50 mV | <50 mV | <50 mV | <50 mV | <120 mV | <50 mV | |
| *Total power +12V plus +5V = 578W - Total power +5V Plus +3,3V= 411W Total power +3,3V plus + 5Vplus + 12V = 6 | | | | | | |

Efficiency (typ) Hold-up Time

>80% (Full Load @ 230 Vac) >20 ms (Full Load)







Protections

| Output Over Voltage | Latch Mode with recovery when fault condition is removed and the Power Supply is cycled ON/OFF |
|----------------------|---|
| Output Overload | Latch Mode with recovery when fault condition is removed and the Power Supply is cycled ON/OFF |
| Output Short Circuit | On Each Output, the power supply shuts down until the fault condition is removed and the power supply is cycled ON/OFF |
| Over Temperature | The Power Supply shuts down to protect itself before excessive temperature causes damage; It restarts when the temperature decreases within acceptable range. |



Soft Start Remote ON-OFF Remote sense Auxiliary voltage Thermal shutdown alarm Fan Rotation Detector

on Output Voltages: +3.3 V, +5 V,+12 V available on stand by +5 V @ 2.5 A

The Power Supply indicates the status of each fan via a logic signal on the connector

Environmental

Operating Temperature0 to +60 °C Full LoadStorage Temperature-40 to +70 °CRelative Humidity5% to 95% (non-condensing)CoolingInternal Fans (temperature controlled speed for low acoustic noise and
extended life performances)

MTBF

500000 h (Estimated value)

Safety

Safety Agency Approvals Safety Standards $_c UR_{uS},$ D, CB Certificate IEC 60950-1 Ed1.0 (2001); UL 60950-1:2003,First Edition, CSA 22.2 No 60950-1-03 1^{st} Ed. April,1 2003

Eu and RoW

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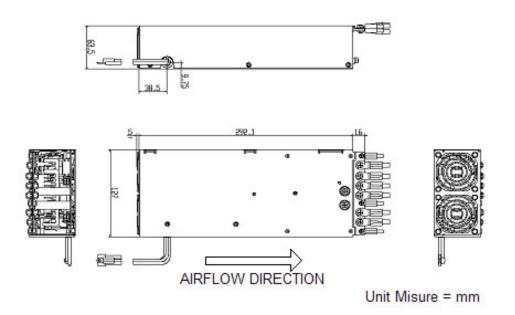


EMC Compliance

| Conducted Emissions | EN55022 Class B |
|--------------------------|-----------------|
| Harmonic Distortion | EN61000-3-2 |
| Flicker and Fluctuation | EN61000-3-3 |
| Electrostatic Discharge | EN61000-4-2 |
| Fast Transients/bursts | EN61000-4-4 |
| Input Line Surges | EN61000-4-5 |
| Voltage Dips | EN61000-4-11 |
| Shock and Vibration Test | |

Physical Specification

Case Dimensions (H x W x D) Weight Fully Enclosed Metal Box 1.5U x 3U x 313mm = 63.5mm x127mm x 313mm = 2.5in x 5.0in x 12.3in 2.8 kg = 6.2 lb



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