



Special Features

Universal Input Voltage Range, 90 to 264 Vac
1008W Output Power
Efficiency ≥ 85%
Output voltage adjustment
Active Current Sharing Capability
Redundant, parallel operation mode capability
Active Power Factor Correction compliant with EN61000-3-2
Conformal Coating for Outdoor Applications
Wide Operating Temperature Range: -34 to +74°C
Self cooled by 2 built-in temperature controlled speed fans
Tested UL60950-1, IEC 60950-1, EN 60950-1, CSA-C22.2 60950-1
RoHS-6 Compliant (Directive 2002/95/EC)





Applications

Media & Entertainment Equipment Outdoor Video LED Display Industrial Equipment

Input Specification



Input Voltage Input Frequency Maximum Input Current Maximum Inrush Current

Power Factor Correction Hold Up Time Input Fusing Protection 110 Vac, 230 Vac, 90 to 264 Vac (Full Range), Single Phase 50 Hz, 60 Hz, 47 to 63 Hz

15A

45 A @ 230 Vac, 25 °C ambient (@ no load and full load) 22 A @ 110 Vac, 25 °C ambient (@ no load and full load)

Active PFC >0.95 @ full load,

>20 ms (@ +24 Vdc nominal output voltage, max load)

two T16A/250V fuses



Output Specification

Maximum Output Power Output Voltage Output Current Overall Voltage Regulation Output Voltage adjustment Ripple Efficiency 1008W continuous 24.1 Vdc \pm 100 mV @ 25 °C ambient, 42 A 0 to 42 A \pm 2% -5% to +10% <240 mV pk-pk @ 25 °C ambient \geq 85% (230 Vac, full load) \geq 80% (115 Vac, full load)







AC-DC 1000W 24Vdc SMPS FOR OUTDOOR VIDEO LED DISPLAY Model RHPS190B



Output Over Current & Short Circuit Output Over Voltage Over Temperature Non-latching shutdown @ 53 A max with a full soft start cycle restart (hiccup)

Non-latching shutdown @ 30 V max with a full soft start cycle restart (hiccup) Lockout by an internal thermal switch and automatic restart



Features

Soft Start at power ON Overshoot Remote ON-OFF Output Voltage Adjust

Turn-on overshoot < 10% over nominal voltage requires a low signal to inhibit output <1 V @ 14 mA max = 5% to +10% @ 100 to 240 Vac _ max power (1008 W) to

- 5% to +10% @ 100 to 240 Vac, max power (1008 W) through accessible trimmer

Input AC Good signal Output DC Good signal Current Sharing Capability Redundancy Conformal Coating output signal (TTL compatible) is active high when input AC is present output signal (TTL compatible) is active high when output DC is present within 10% of the average current at maximum load. Single-wire connection Parallel Operation Mode capacity. Parallel up to 3 units.

HumiSeal P/N 1B31(MIL-I-46058C and IPC-CC-830 qualified)



Environmental

Operating Temperature Extended operating temp.

-34 to +45°C ambient (full load), PS is able to start at −34°C

+45°C to +65°C (with linear 2% per degree output power de-rating above

50°C)

-40 to +85°C

10% to 90% (operating), 5% to 95% (storage), Relative Humidity, non-

Storage Temperature Humidity condensing Cooling

Safety Agency Approvals

self cooled by 2 Internal fans with temperature controlled speed (lower

acoustic noise, extended life performances)

Reliability MTBF>300000 hours (calculated, TELCORDIA Issue1) @ 45°C ambient, full

load

Safety



Isolation voltage Input to chassis (1500 Vac); input to output (2120 Vac);

Output to chassis (500Vdc) cURus, D, CB certificate

Safety Standards IEC 60950-1, UL 60950-1, CSA C22.2 No. 60950-1-03

Eu and RoW

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Conducted & Radiated emissions EN55022, Class B

Harmonic Emission EN61000-3-2

Immunity EN55024 (Information Technology equipment)

EN61000-4-2 Electrostatic Discharge Radiated RFI EN61000-4-3 Electrical Fast Transients / Bursts EN61000-4-4 EN61000-4-5 Input Line surges

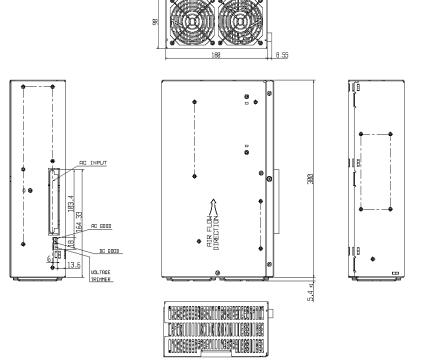
Conducted RFI EN61000-4-6 Voltage dips, variations, interrupts EN61000-4-11



Physical Specification

Case Dimensions (H x W x D) Weight Outline drawing

fully enclosed metal box IP20 conform $3.54 \text{ in } \times 7.08 \text{ in } \times 11.81 \text{ in} = 90 \text{ mm } \times 180 \text{ mm } \times 300 \text{ mm}$ 7.9 lb = 3.6 kg



Unit of measure = mm

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