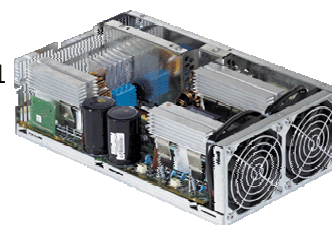


Special Features

Universal Input Voltage Range, 90 to 264 Vac
1008W Output Power
Efficiency $\geq 85\%$
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 Application
Wide Operating Temperature Range: -34 to $+74^{\circ}\text{C}$
Self cooled by 2 built-in temperature controlled speed fans
Complies with 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 Wall Display
Industrial Equipment

Input Specification

Input Voltage	110 Vac, 230 Vac, 90 to 264 Vac (Full Range), Single Phase
Input Frequency	50 Hz, 60 Hz, 47 to 63 Hz
Maximum Input Current	15A
Maximum Inrush Current	45 A @ 230 Vac, 25 °C ambient (@ no load and full load) 22 A @ 110 Vac, 25 °C ambient (@ no load and full load)
Power Factor Correction	Active PFC >0.95 @ full load,
Hold Up Time	>20 ms (@ +24 Vdc nominal output voltage, max load)
Input Fusing Protection	two T16A/250V fuses

Output Specification

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

Protection

Output Over Current & Short Circuit	Non-latching shutdown @ 53 A max with a full soft start cycle restart (hiccup)
Output Over Voltage	Non-latching shutdown @ 30 V max with a full soft start cycle restart (hiccup)
Over Temperature	Lockout by an internal thermal switch and automatic restart

Features

Soft Start at power ON	Turn-on overshoot < 10% over nominal voltage requires a low signal to inhibit output <1 V @ 14 mA max
Overshoot	
Remote ON-OFF	- 5% to +10% @ 100 to 240 Vac, max power (1008 W) through accessible trimmer
Output Voltage Adjust	
Input AC Good signal	output signal (TTL compatible) is active high when input AC is present
Output DC Good signal	
Current Sharing Capability	within 10% of the average current at maximum load. Single-wire connection
Redundancy	Parallel Operation Mode capability. Parallel up to 3 units.
Conformal Coating	HumiSeal P/N 1B31(MIL-I-46058C and IPC-CC-830 qualified)

Eu and RoW

ROAL Electronics S.p.A.
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel: +39 071 721461
Fax: +39 071 72146 480

www.roallivingenergy.com

North America

ROAL Electronics USA, Inc.
701, Main St. Suite 405
Stroudsburg, PA18360
Phone: +1 570 421 5750
Fax: +1 570 421 5687
Rev. 02 May07 – Pag. 2/4

Environmental

Operating Temperature	-34 to +60°C ambient (full load), PS is able to start at -34°C
Extended operating temperature	+60°C to +74°C (with linear 4.5% per degree output power de-rating)
Storage Temperature	-40 to +85°C
Humidity	10% to 90% (operating), 5% to 95% (storage), Relative Humidity, non-condensing
Cooling	self cooled by 2 Internal fans
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)
Safety Agency Approvals	CURUS, CB Safety Standards IEC 60950-1, UL 60950-1, CSA C22.2 No. 60950-1-03

EMC Compliance

Conducted & Radiated emissions	EN55022, Class B
Harmonic Emission	EN61000-3-2
Immunity	EN55024 (Information Technology equipment)
Electrostatic Discharge	EN61000-4-2, Level 4, Evaluation Criterion A
Radiated RFI	EN61000-4-3, Level 3, Evaluation Criterion A
Electrical Fast Transients / Bursts	EN61000-4-4, Level 3, Evaluation Criterion A
Input Line Surges	EN61000-4-5, Level 3, Evaluation Criterion A
Conducted RFI	EN61000-4-6, Level 3, Evaluation Criterion A
Voltage Dips, Interrupts	EN61000-4-11, -30%, -60%, -100%;10/50/100/500 ms, 1 s, 5 s; Evaluation Criterion A/B

Eu and RoW

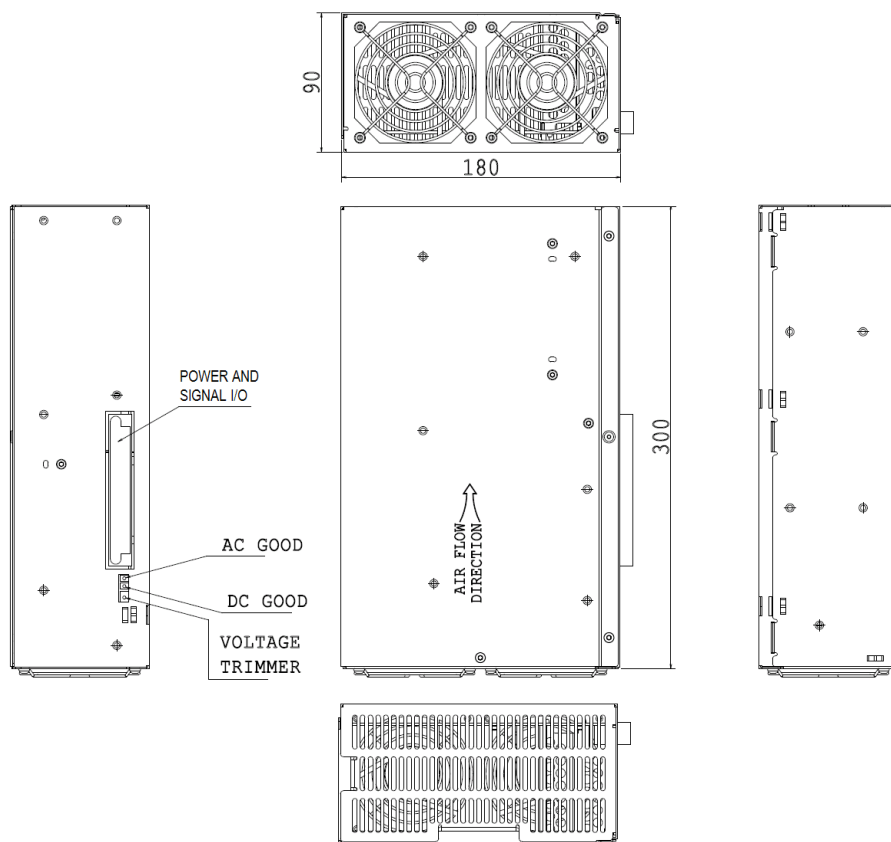
ROAL Electronics S.p.A
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel:+39 071 721461
Fax:+ 39 071 72146 480
www.roallivingenergy.com

North America

ROAL Electronics USA, Inc.
701, Main St. Suite 405
Stroudsburg, PA18360
Phone: + 1 570 421 5750
Fax: +1 570 421 5687
Rev. 02 May07 – Pag. 3/4

Physical Specification

Case	fully enclosed metal box IP20 conform
Dimensions (H x W x D)	3.54 in x 7.08 in x 11.81 in = 90 mm x 180 mm x 300 mm
Weight	7.9 lb = 3.6 kg
Outline drawing	



Unit of measure = mm

Roal Electronics, S.p.A. may change product specifications and accordingly the information presented in this document. Customers are responsible for their products and applications using Roal Electronics, S.p.A. products. Roal Electronics, S.p.A. assumes no liability from the use of its products outside of specifications. No license is granted to any intellectual property rights by this document. ROAL ELECTRONICS, S.P.A. DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF NONINFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

Eu and RoW

ROAL Electronics S.p.A.
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel: +39 071 721461
Fax: +39 071 72146 480
www.roallivingenergy.com

North America

ROAL Electronics USA, Inc.
701, Main St. Suite 405
Stroudsburg, PA18360
Phone: +1 570 421 5750
Fax: +1 570 421 5687
Rev. 02 May07 – Pag. 4/4