VxI POWER LIMITED

Oracle Series
170W Power Supply & Battery Charger

- ☑ **230V/120V, AC - DC Switch Mode PSU.**
- ☑ **Operable in Mains-Free Standby Mode.**

- ☑ **Main Output - 6A(24V), 12A(12V)**
- ☑ **Battery Charger Output - 2A(24V), 4A(12V)**
- ☑ **Panel or Din Rail Mounting Options.**
- ☑ **PCB Conformal Coating Available.**

- ☑ **Overload & Short Circuit Protection.**
- ☑ **Current Limit & Polarity Protection.**
- ☑ **Overvoltage Protection. (Main equipment and battery).**
- ☑ **Undervoltage Lockout Protection.**

- ☑ **CE Compliant.**
- ☑ **EN50081-2 Compliant.**
- ☑ **EN50082-2 Compliant.**

General Features

Customer Inspired Design:
Building to satisfy demand, we've added a new 12volt model to partner our existing 24volt units.

With seperate load and battery charging outputs, all models in the range are ideal for critical battery backed applications such as *Fire Panels, Security Systems,* and *Process Control Equipment*, in fact anywhere that your systems must function when the AC supply fails.

Simple, Reliable, Effective:
Identical in every way but voltage, the units are built for panel mounting and feature the option for fitting a Din Rail Mounting Kit.

Connections are made using screw-down terminals and 'Molex' Pin Headers.
User accessible fuse protection is included as are high visibility status and alarm indicators.

Built in electronic protection automatically prevents deep discharge of backup batteries whilst temperature sensing and float charging ensures that cells are always at peak capacity.

As an added feature, an external TTL signal can reroute charging power to supply the main output during periods of intense use when greater load currents may be required.

As with all VxI Power's products, custom specifications can be engineered upon request.

	12V Unit	24V Unit
DC Output Voltages V01 Main O/P V02 Battery Charge O/P @ 20ºC 5mA float current. Temp compensated float voltage.	 14.4V +/- 50mV@10A 13.7V -/+ 100mV	 28.7V+/- 100mV@4A 27.3V +/- 200mV
DC Output Current V01 V02	 10A Nom, 12A Pk 4A	 4A Nom, 6A Pk 2A
Line Regulation (Full Load) **Load regulation** V01 V02 **Output Ripple and Noise** Noise/Ripple peak-peak all outputs:	 <0.5% Max 50mV Max 1.5V Typical <75mV	 <0.5% Max 50mV Max 1.5V Typical <150mV
Standby Operation	12A Max	6A Max
Overload Protection V01 V02 **Overvoltage Protection** V01 Voltages exceeding V02 Voltages exceeding	 120-150% Max output 4A +/- 200mA dc 16.7V 16V	 120-150% Max output 2A +/- 200mA dc 32V 30V
Volt free relay contacts/LEDs **Power OK Signal** **Charger fault** **Battery Overdischarge** **Battery Low Alarm** **Input Voltage Fault** **Battery Fault**	 LED and TTL compatible signal-operates when any of the following alarms activated. Loss of charge current/battery voltage. Uses Internal Relay. 10V +/- 250mV 13.1-15.75V 9V	 20V +/- 500mV 26.2-31.5V 18V

EMC **Susceptibility**	EN50081-1 Emissions EN50082-2 Immunity EN61000-4-2 ESD EN61000-4-3 Radiated Electromagnetic Interference EN61000-4-4 Fast Bursts EN61000-4-5 Voltage Transients - Slow High energy
Environmental **Ambient Operating Temp** **De-rating @ 2.5% per ºC** **Storage Temperature**	 -20ºC to +50ºC (No De-rating) +50ºC to 70ºC ambient -30ºC to +85ºC
Connectors **Input** **Output** **Signals**	 Screw terminals Screw terminals Molex
Input Voltage **Input Frequency** **Input Current** **Input Fusing** **Inrush Current** **Efficiency**	120V/230V AC RMS Nom (Link selectable) 47 - 63Hz 2.9A rms typ @ 110V 1.6A rms typ @ 230V PCB Mounted fuse T4A, 250V AC HRC UL/CSA Approved - non-user replaceable. Max limited to <30A peak Cold start 20ºC ambient - 265V AC >75% under all loads line and environmental conditions
Battery Input **Battery Fusing**	Protected by reverse parallel diode & fuse T10A

Model Numbers:

14669-000	12v
14575-000	24v
14613-000	Din Rail Kit

External Connections

PL1

Pin 1	Live
Pin 2	Neutral
Pin 3	NC
Pin 4	Earth
Pin 5	Earth

PL2

Pin 1	V02 Battery +ve
Pin 2	V02 Battery -ve
Pin 3	V01 Main +ve O/P
Pin 4	V01 Main +ve O/P
Pin 5	0v
Pin 6	0v
Pin 7	Thermistor
Pin 8	Thermistor
Pin 9	Power OK TTl Alarm
Pin 10	Battery Defeat
Pin 11	Battery Defeat
Pin 12	Ext Charge Disable

PL3

Pin 1	N/C
Pin 2	N/C
Pin 3	N/C
Pin 4	External OK LED
Pin 5	External Fault LED
Pin 6	Battery Low
Pin 7	Signal 0V
Pin 8	N/C