

# CP Power & Automation Ltd

## *Oracle Series 45W Power Supply & Battery Charger*



- ☑ Universal Input, AC - DC Switch Mode PSU.
- ☑ Operable in Mains-Free Standby Mode.
  
- ☑ 12 or 24v Models.
  
- ☑ Din Rail or Panel Mounting.
- ☑ Signal Output.
- ☑ PCB Conformal Coating Available.
  
- ☑ Overload & Short Circuit Protection.
- ☑ Current Limit & Polarity Protection.
- ☑ Overvoltage Protection.
- ☑ Undervoltage Lockout Protection.
  
- ☑ CE & EMC Compliant.
- ☑ EN60950 Compliant.

## **General Features.**

### **Built on Success:**

The latest models in the growing range of Oracle Power Supplies build on the advances of other units in the successful Oracle range.

Both 12 & 24V feature a range of output powers and Din or Panel mounting options.

### **Intelligent Design:**

The 45w unit allows flexible use of the main and battery charge outputs. The total output current of the unit can be apportioned across the outputs in accordance with customer requirements.

Built to fit into almost any space, each unit features screw-terminals for input and output connections but retains the option for custom fittings to suit individual needs.

Signal outputs can be configured at the factory to reflect the applications needs.

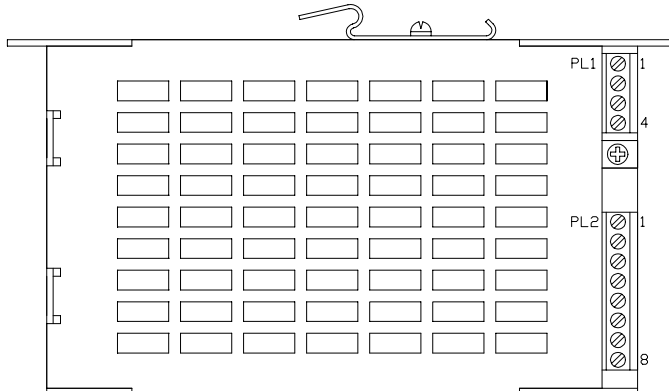
Our standard protection circuitry safeguards your equipment, and batteries during normal and fault conditions.

As with all our products, custom specifications can be engineered upon request.

	12V UNIT	24V UNIT
<b>DC Output Voltages</b> V01 Main O/P V02 Battery Charge O/P @ 20°C 5mA float current. Temp compensated float voltage.	14.3V +/- 50mV 13.7V +/- 100mV	28.6V +/- 100mV 27.4V +/- 200mV
<b>DC Output Current</b> Shared across V01 & V02	3A Total	1.5A Total
<b>Line Regulation</b> (full load) <b>Load regulation</b> V01 (over range 0 - 3A) V02 (over range 0 - 1.5A)	<0.5% 50mV Max 1.5V Typical	<0.5% 50mV Max 1.5V Typical
<b>Output Ripple and Noise</b> PSU loaded to 60W @ 240Vrms over a bandwidth of 0 - 30MHz Noise/Ripple (peak-peak all outputs)	<100mV	<100mV
<b>Standby Operation</b>	3A Nom.	1.5A Nom.
<b>Overload Protection</b> V01 (Primary power limit) V02 (Constant current limit) <b>Over voltage Protection</b> V01 Voltages exceeding V02 Voltages exceeding	120-150% Max Up to 1A (Factory Set) 16V 16V	120%-150% Max Up to 1A (Factory Set) 32V 32V
<b>Volt free relay contacts/LEDs</b> VFR O/Ps  LEDs	Pins 7 & 8 are configurable at the factory for specific customer needs. 2 LED's are configurable at the factory for specific customer needs.	

<b>EMC</b>	EN50081-1 Emissions EN50082-2 Immunity EN61000-4-2 ESD EN61000-4-3 Radiated Electro Interference EN61000-4-4 Fast Bursts
<b>Susceptibility</b>	
<b>Environmental</b> <b>Ambient Operating Temp</b> <b>De-rating @ 2.5% per °C</b> <b>Storage Temperature</b>	-20°C to +50°C (No De-rating) +50°C to 70°C ambient -30°C to +85°C
<b>Connectors</b> <b>Input</b> <b>Output</b>	4 way, 5.08mm Screw Terminal 8 way, 5.08mm Screw Terminal
<b>Input Voltage</b> <b>Input Frequency</b> <b>Input Current</b>	90V - 260V AC rms 47 - 63Hz 1.2A rms typ @ 110V 0.6A rms typ @ 230V
<b>Input Fusing</b> PCB Mounted fuse	T2A, 250V AC HRC UL/CSA Approved - non-user replaceable.
<b>Inrush Current</b>	Max ltd to <30A peak Cold start 20°C ambient - 265V AC
<b>Efficiency</b>	12V UNIT >75% under all loads line and environmental conditions 24V UNIT >82%
<b>Battery Input</b> <b>Battery Fusing</b>	Protected by reverse parallel diode & fuse 12V UNIT T3.15A 24V UNIT T1.6A

Model Numbers: 14841-000 12v Din Mount  
14841-000 12v Panel Mount  
14842-000 24v Din Mount  
14842-000 24v Panel Mount



Connector (Pin Functions)	
<b>PL1 (Input)</b>	<b>PL2 (Output)</b>
Pin1: Live	Pin1: Batt+
Pin2: Neutral	Pin2: Batt-
Pin3: N/C	Pin3: +Vout
Pin4: Earth	Pin4: +Vout
	Pin5: 0V
	Pin6: 0V
	Pin7: Configurable
	Pin8: Configurable

