VxI POWER LIMITED

Oracle Series
75W Power Supply & Battery Charger

Features

- ☑ **Designed to meet EN54-4**
- ☑ **Universal Input, AC - DC Switch Mode PSU.**
- ☑ **Operable in Mains-Free Standby Mode.**
- ☑ **12 or 24v Models.**
- ☑ **Din Rail or Panel Mounting.**
- ☑ **Volt free relays/signals.**
- ☑ **Battery and load protection**

Options

- ☑ **Regulated main output**
- ☑ **Auxillary outputs**
- ☑ **Dual path fusing**
- ☑ **Choice of connectors**

Standards

- ☑ **EN54-4 Compliant.**
- ☑ **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.

Intelligent Design:

Designed specifically for applications within the Fire Protection, Telemetry and Control industries, the 75W unit represents a high level of functionality tailored to the requirements of these users.

Conceived as a multi application platform, the unit is designed to meet EN54-4, and offers options normally only found on larger units, such as auxillary outputs.

Signal outputs are provided as standard, the factory default volt free relays being EN54-4 compliant. Other configurations are available - consult the factory for details.

Our standard protection circuitry safeguards your equipment, and batteries during normal and fault conditions. Close control of the charge/discharge allows the maximum life to be obtained from your batteries.

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 (standard)	14.3V +/- 50mV Tracks battery voltage on standby	28.6V+/- 100mV Tracks battery voltage on standby
V02 Battery Charge O/P	13.7V -/+ 100mV Temperature compensated	27.4V +/- 200mV Temperature compensated
DC Output Current Shared across V01 & V02 *Total available output is 75W, main output current will be reduced where an auxillary output is fitted	5A*Total	2.5A* Total
Line Regulation (full load) **Load regulation** V01 (over range 10-100%) V02 (over range 10-100%)	<0.5% 50mV Max 1.5V Typical	<0.5% 50mV Max 1.5V Typical
Output Ripple and Noise PSU loaded to 60W @ 230Vrms over a bandwidth of 0 - 30MHz Noise/Ripple (peak-peak all outputs)	<100mV	<100mV
Standby Operation	5A Nom.	2.5A Nom.
Overload Protection V01 (Primary power limit) V02 (Constant current limit)	120-150% Max Up to 1A (Factory Set)	120%-150% Max Up to 1A (Factory Set)
Battery Input **Battery Fusing**	Inherant reverse protection T6A	Inherant reverse protection T4A
Over voltage Protection V01 Voltages exceeding V02 Voltages exceeding	16V 16V	32V 32V

Volt free relays/signals/LEDs

IO1 BATTERY LOW
IO2 SYSTEM FAULT
LED1 CHARGER FAULT
LED2 BATTERY LOW
LED3 STANDBY SUPPLY FAULT
LED4 MAIN SUPPLY FAULT
FAULT TTL SYSTEM FAULT
FAULT TTL SYSTEM FAULT (INVERTED)

Other configurations are available-consult factory for details

Conditions for active signals

	IO1	IO2	LED 1	LED2	LED3	LED4	FAULT
Battery low	☑	☑		☑	☑	☑	☑
Battery reversed		☑			☑	☑	☑
Battery disconnected		☑					☑
AC mains failure	☑	☑	☑			☑	☑
Charger failure		☑					

EMC	EN50081-1 Emissions EN50082-2 Immunity
Susceptibility	EN61000-4-2 ESD EN61000-4-3 Radiated Electro Interference EN61000-4-4 Fast Bursts
Environmental	
Ambient Operating Temp	**-5°C to +40°C derate 2.5% per °C>40°C**
Storage Temperature	**-30°C to +85°C**
Connectors	
Input/Output/Signal	**Screw Terminal or Weidmuller Kilppon**
Thermistor	**0.1" Molex 2 way**
Input Voltage	90V - 260V AC rms
Input Frequency	47 - 63Hz
Input Current	2A rms typ @ 110V 1A rms typ @ 230V
Input Fusing	T3.15AA, 250V AC HRC
PCB Mounted fuse	UL/CSA Approved
Inrush Current	<30A peak, cold start 20°C ambient - 265V AC
Efficiency	12V UNIT >75% under all conditions 24V UNIT >82% under all conditions

Options

	Regulated main output	Auxillary output	Dual Path fusing (split main output)
Spec	**12 or 24V**	**5V, 12-15V, 24V**	**2 x pcb 2A*fuses**
Output current	**2.5A/1.7A**	**5V/3A, 12-15V 2A 24V 1.25A**	
Line regulation (full load)	**<0.5%**	**<0.5%**	
Load regulation (10-100%)	**<0.5%**	**<0.5%**	
Overcurrent protection	**120% nom**	**120% nom**	
Overvoltage protection	**120% nom**	**120% nom**	
Ripple/noise (Full load, pk-pk)	**<1%**	**<1%**	

*** consult factory for 12V dual path fusing applications**

Ordering information:

ORACLE III 75P-28SD12ST

- Mounting configuration: P = Panel; D = Din Rail
- Main output voltage
- Main output configuration: DP = Dual Path Fusing; R = Regulated; S = Standard
- No of outputs: D = Dual (Main and Batt); T = Triple; Q = Quad
- Auxillary output voltage(s)
- Connectors: ST = Screw Terminals; K = Klippon

Dimensions