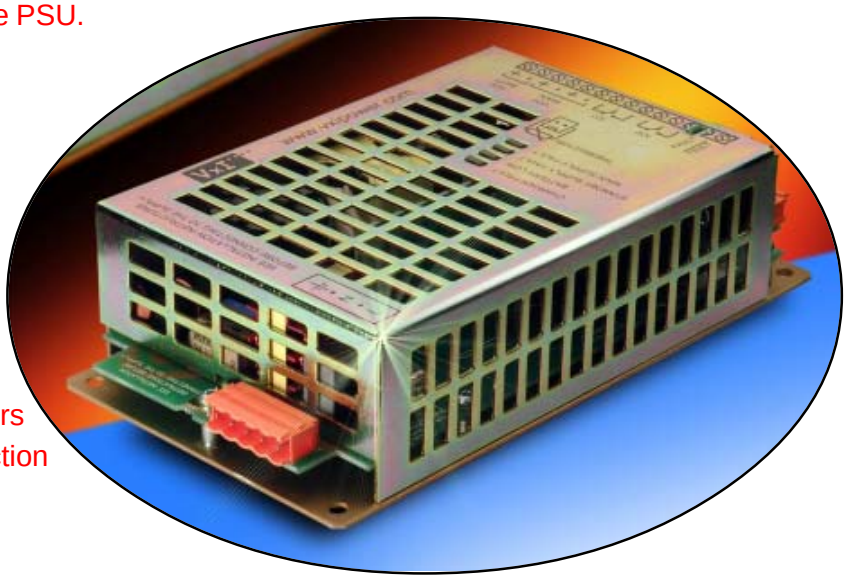
Oracle Series
75w Battery Backed Power Supply

- Universal Input, AC - DC Switch Mode PSU.
- 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
- Battery test, SPI port for local connection

Standards
- 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 offers options normally only found on larger units, such as auxillary outputs, configurable I/O and an SPI port.

Signal outputs and volt free relays are provided as standard. Other configurations are available - consult the factory for details.

Our standard protection circuitry safeguards your equipment, and batteries during normal and fault conditions. Temperature compensated charging and deep discharge protection allow the maximum life to be obtained from your batteries.

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

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	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	2.8A 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.	2.8A Nom.
Overload Protection V01 (Primary power limit) V02 (Constant current limit)	120-150% Max Up to 5A (Factory Set)	120%-150% Max Up to 2.8 (Factory Set)
Battery Input **Battery Fusing**	Inherant reverse protection F6A	Inherant reverse protection F4A
Over voltage Protection V01 Voltages exceeding V02 Voltages exceeding	16V 16V	32V 32V

Volt free relays/signals/LEDs

IO1	VFR BATTERY LOW
IO2	VFR SYSTEM FAULT
IO3	TTL SYSTEM FAULT
IO4	TTL SYSTEM FAULT (INVERTED)
LED1	CHARGER FAULT
LED2	BATTERY LOW (LED FLASHES WHEN CHARGING)
LED3	STANDBY SUPPLY FAULT
LED4	MAIN SUPPLY FAULT

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	EN61000-6-3 Emissions
Susceptibility	EN61000-4-2 ESD EN61000-4-3 Radiated Electro Interference EN61000-4-4 Fast Bursts EN61000-4-5 Surge Immunity Test EN61000-4-6 Radio Frequency Test
Safety	EN60950-1
Environmental	
Ambient Operating Temp	**-5°C to +55°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	85V - 264V 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

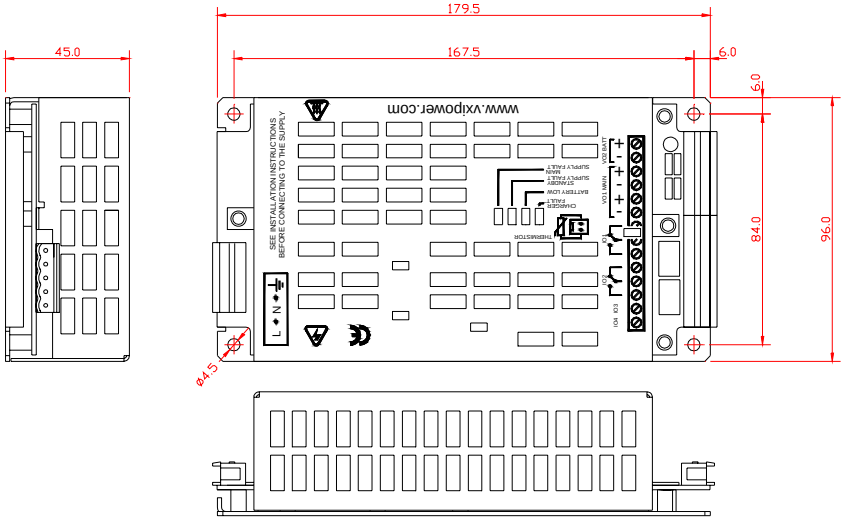
Options

	Regulated main output	Auxillary output	Dual Path fusing (split main output)
Spec	**12 or 24V**	**5V, 12-15V, 24V**	**2 x pcb 4A*fuses**
Output current	**2.5A/1.5A****	**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**
****total output power is reduced by 10% when regulated main output is used**

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