

PSUMON-01



Real-time display and monitoring of voltage, current, impedance & faults on Dycon Intelligent 24VDC power supply units



Switch selectable legend key, useful for new engineers.



High speed sampling rate displays peak-to-peak voltages and current outputs of the connected equipment.

- Constantly monitors the operational performance of any Dycon intelligent 24VDC PSU's
- Provides clearer & more accurate readings of PSU & battery voltages, current & impedance than normal multi-meters
- Realistic battery impedance monitoring
- Clear, single screen, easy-to read text display
- In-tolerance readings are displayed in **GREEN**
- Changes to **RED** when problems or out-of-tolerance are identified
- On-screen display legend key to avoid mistakes

Many of today's corporate operations increasingly rely on critical infrastructure resilience solution hardware to keep their business and premises safe and functioning, this can be compromised if the power that they require to operate these systems fails. Dycon's PSUMON-01 provides a simple way of providing advance notice of impending and actual on-site problems by constantly monitoring how any connected Dycon D243X-series 24VDC PSU is operating. The unit simply plugs into the D234X PSU's on-board data-port socket, while connected, the display shows, in real time, all the operational data, without the need for multi meters. A selectable fast-scan mode shows even the smallest changes in milli volts and milli-amperes, any fault messages are displayed in red. Batteries are independently monitored and the precise measurement also shows bad battery connections. The charging voltage and current depends on the battery temperature and the smart charging of the D243X series is clearly shown on the display. And D243X PSU's integral impedance tester will display the battery status. The real time data also provides all the information on a single screen to ensure that the correct battery and amperage is installed to meet the EN54-4 standards on battery backup and re-charging times.

Installer Friendly

The D243X series have the among lowest power consumptions on the market, it is same with the PSU monitoring unit, the unit draws its power from the PSU itself, it does not need a separate battery or power feed. This in-depth PSU monitoring provides helpful data eliminating returns due to connection issues with other equipment, cabling or incorrect multi meter settings.

When the PSU monitoring is connected using the included cable, it will automatically display all the important information on a single screen. This saves valuable time compared to connecting a multi-meter to the outputs, batteries to monitor these one by one. A PSUMON-01 monitor removes the need to carry out separate tests to check voltage, current or impedance, a single operation tests all these functions as well as checking and displaying that the PSU itself is still functioning correctly.

Once an engineer attending site to carry out routine maintenance or a repair has removed the PSU lid, they can see, instantly, the status of all the critical parameters displayed on the easy-to-read LED text display

If any fault is discovered the display line text for that function turns to **RED**, focussing the engineer's attention rather than having to try to trace why a simple LED has turned on.

D243X-series PSUs have two separate 24VDC outputs to providing a safety buffer when used in an EN54-5 system, these are monitored and shown as Voltage 1 and Voltage 2 rather than simply showing a combined figure. Again, this speeds up identifying on-site problems. The system's two 12VDC batteries are independently monitored and the precise measurement display also shows any bad battery connections

Ambient temperature can be critical to the performance and longevity of connected batteries, all D243X PSUs have an on-board temperature-sensor which enables the PSU to vary the charging rate to lessen this impact. The display indicates the actual ambient temperature so that an engineer can ensure that this will not cause future problems.

3-Colour display shows live data & faults

Display Example



In this example, RED text shows that the batteries are not connected and that switched output 2 is turned off

The following states are monitored and displayed : -

- Voltage output 1
- Voltage output 2
- Amperage output 1
- Amperage output 2
- Battery 1 voltage
- Battery 2 voltage
- Battery charge voltage
- Battery charge current
- Temperature in Degrees C
- Impedance battery combined
- Battery status
- Switched input 1 and 2
- AC Mains status
- PSU fault status messages
- Low power unit with sleep and off mode
- Impedance battery combined
- Battery status
- Switched input 1 and 2
- AC Mains status
- PSU fault status messages

Specifications

Model No.	PSUMOD-01
Description	Power Supply Unit (PSU) Monitor
Compatible Dycon Intelligent 24VDC PSU's	D2431, D2433 & D2435
Voltage Input	5 to 14 VDC
Max. Input Continuous Current	30 mA at 5 volts
Cable	5-core included
LED 1	Red = Power on
LED 2	Green = Data
Switch 1	Display legend, product info and fast-scan mode
Switch 2	Deep sleep mode - switches off display
Display Language	English (others on request)
Output Monitoring Threshold	Battery Charging Voltage $\leq \pm 2\%$
Sleep Mode	Toggle switch
ON/OFF	Slider switch
Operating Temperature Range	-10°C to +40°C
Humidity	95% non-condensing
Unit size	93 x 61 x 20mm

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Dycon leads the security and associated power supply markets, with UK design and manufacture of advanced power products, engineered to provide high quality, cost-effective solutions to meet current regulations and the specific needs of system integrators and end-users.

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