



D1460

Advanced Technology, 10A Switched-Mode Power Supply for Larger System Applications with 9 Programmable, Switched Outputs



Specially designed for larger system applications, the Dycon D1460 is a 10A switched mode power supply with 9 x switched and programmable 12VDC x 1A outputs which can be divided into two separate switched groups, an 'always-on' group and individual outputs switching can be selected by jumper link. Individual outputs can be connected in parallel for high current loads making the D1460 a highly flexible, single, power solution. Master/Slave ganging allows the connection of 2 x D1460s together to provide a formidable 20A solution. Additionally, 3 x normally closed (NC) volt-free 'fault' outputs are provided for remotely signalling the status and serviceability of units. These fault outputs can be used to indicate problems either locally or remotely via a suitable signalling device. Battery-health impedance checks and battery presence checks, over-voltage shutdown protection and a 16-LED status display all go to ensure that an access control, BMS or other major system, functions continuously and that security is always at an optimum level. The D1460 also features Dycon's unique protective technology with intelligent and capacitive load switching surge protection and snubbing and its switched outputs are designed for highly inductive loads (door strikes and locks) removing the chance of an 'electrical spike' or transient causing a door to remain closed or open, a frequent cause of personnel delays and expensive engineer call outs.



DYCON
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D1460 Major System Power Solutions

12VDC 10A Switched-Mode Power Supply

| SPECIFICATIONS | |
|---|--|
| AC Input Voltage | 230VAC ±10%, 50Hz. |
| SMPS PSU protection | Hysteric over-temperature and over-voltage protection |
| Maximum Input Continuous Current | 1A |
| Peak inrush current limit | 20A maximum. |
| Recommended Switched Spur Input Fuses | 250V T3.15A 1.5KA breaking |
| Voltage Output AC Present | Minimum 13Vdc, Maximum 13.9Vdc, Load Dependant |
| Voltage Output Standby | Minimum 10Vdc, 12 V Nominal, Load Dependant |
| Current output with battery charging | 10A |
| Battery Charging Current | Constant current, low impedance, 1A minimum |
| Low Voltage detection thresholds | <11V ±2%, low voltage restore, >11.5V ±2%. |
| Battery Fault Circuit Impedance Threshold | >0.18 Ohm ±5%, at a nominal test current of 5A. |
| Deep Discharge Disconnection Threshold | <10.5V ±2%. |
| Overvoltage Detection Shutdown Threshold | >15V ±2%. |
| Output Monitoring Threshold | Battery charging voltage <2V ±2%. |
| On-Board AC Power Input Fuse | 1A timed, 1.5KA breaking, ceramic |
| Battery Fuse | PTC, self-resetting, non-replaceable |
| Switched Output Fuses 1 to 9 | 1.1A PTC, self-resetting, non-replaceable |
| SW1, SW2, ALL Control Inputs | Logical 0 <1V, Logical 1 >4V, 30V tolerant, 100K pull-down |
| Fault Relays | Normally closed, 100mA at 60V. On-Resistance 16 ohms maximum, 1500VRMS Isolation voltage |
| Battery current drawn by power supply without AC supply | Maximum 90mA (Depending on PSU status) |
| Maximum Ripple Voltage | 100mV peak to peak noise and ripple |
| Battery Type | Sealed Lead Acid Gel, 12V, 24AH maximum for 24 hour charging |
| Operating Temperature/Humidity | -10°C to +40°C, 95% maximum humidity, non-condensing |
| PCB Footprint Dimensions | 210mm X 160mm |

| Model | Description | PCB | B box (260 x 320 x 90mm) | C box (345 x 430 x 90mm) |
|-------|--|---------|-----------------------------|-----------------------------|
| D1460 | 10 Amp - 12VDC - with battery charging | D1460-P | D1460-B | D1460-C |

Dycon Power Solutions Ltd

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For more information about the Dycon range of power products:
www.dyconpower.com

Or to discuss your specific needs:
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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.

Designed and manufactured in the UK