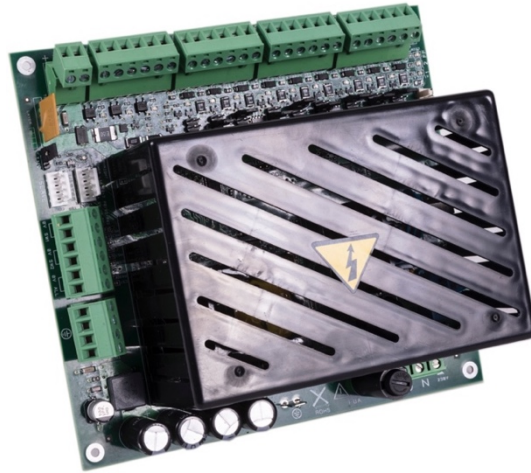


D1460-Series



Advanced Technology, 10A / 20A Switched-Mode Power Supplies with 9 or 18 Programmable, Switched, 1A outputs and a Range of Housings Designed to Accept 6 or 9 x Lenel™, Mercury™, Vanderbilt™, or Similar Controllers. A PCB-only version is also available.



Specially designed for larger system applications, the Dycon D1460-series features an advanced technology 10A switched-mode power supply module designed to be used singly or in pairs and fitted into a range of housings or control. Featuring Dycon's unique protective technology with intelligent and capacitive load switching surge protection and snubbing and the 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.

Each module has 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. Using other links, two or three Individual outputs can be connected in parallel to create 2A or 3A high current outputs 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. Several different housings are available including two units that are specially designed to accept six or nine Lenel™/Mercury™/Vanderbilt™ door or system controllers and supplied with cable trunking and fixings to simplify installation. A PCB-only version lets you install a D1460 in existing housings or controller units, a useful feature when removal of existing housings on-site might prove difficult.

An integral data-port enables a connected Dycon D2330 Data-Logger to show the operational status of the unit including output voltages and current, battery charge rates/ voltages, battery impedance and ambient temperature, in addition, it will display if there any current faults. The D2300 can read the internal fault log showing any of eleven different types of fault events that may have occurred since the log was last cleared.



DYCON
power solutions

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D1460-Range Major System Power Solutions

Housing options

D1460-C

Single 10A module applications with space for a single 7Ah or 17Ah battery

- Dycon 'C-box' is 345 (h) x 430 (w) x 90mm (d).
- There is limited additional space available to fit just a single controller or other 3rd Party module.

D1460-E

Single 10A module + several controllers or other 3rd Party devices and/or a second 7Ah or 17Ah battery

- Dycon 'E-box' is 500 (h) x 400 (w) x 90mm (d).
- Sufficient space to enable a variety of different control or other function modules.
- Space for 2 x 7Ah or 17 Ah standby batteries.

D1460-G6

Single 10A module + space for 6 Mercury™, Lenel™ or Vanderbilt™ controllers + batteries

- 687 (h) x 456(w) x 116mm (d).
- Space and fixings for 6 x Lenel™, Mercury™ or Vanderbilt™ or similar door controllers.
- Suitable feather cable-trunking supplied and fitted.
- Additional space for suitable standby batteries.

D1462-G9

2 x 10A modules + 9 Mercury™, Lenel™ or Vanderbilt™ controllers + batteries

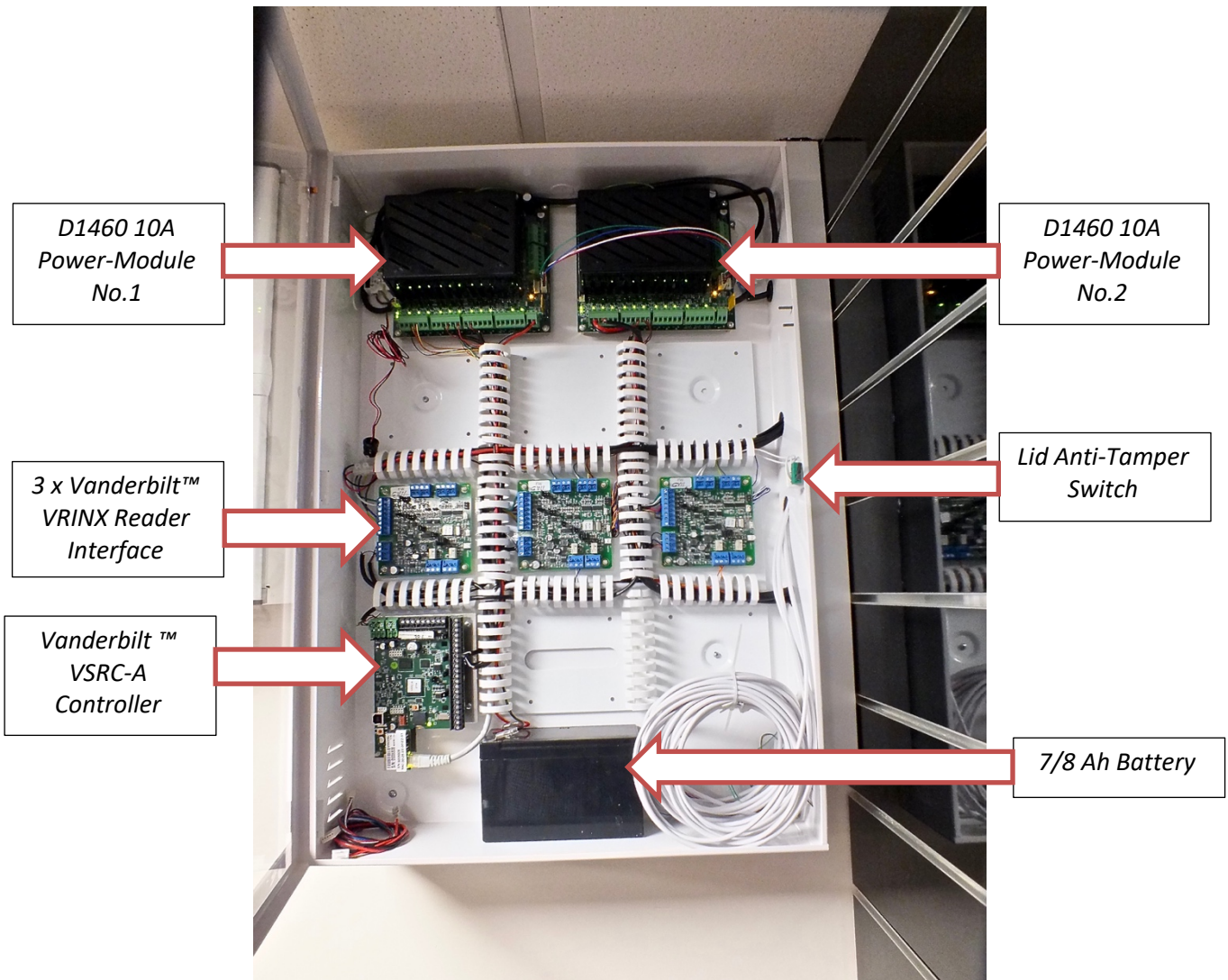
- 687 (h) x 456 (w) x 116mm (d).
- Space and fixings for 9 x Lenel™, Mercury™ or Vanderbilt™ or similar door controllers.
- Suitable feather cable-trunking supplied and fitted.
- PSU module-to-PSU module interconnection cable supplied and fitted.
- Additional space for standby batteries.

Common features/options for D1462 'G-Boxes'

- Hinged, solid steel door with Key-Lock security.
- Standard finish is spray painted gloss white and heat-treated to provide a durable finish, wipe-clean surface.
- Standard colour is white but black can be ordered at extra cost and subject to a minimum quantity order.
- Custom paint colours can be accommodated if that colour is available in the type of paint used by our manufacturing process, and is subject to a minimum order quantity of 50 units.

A typical D1460-G9 system during installation

(Note the neat cabling achieved by using the trunking supplied!)



Dycon D1462-G9 unit fitted 2 x 10A modules installed and connected; 3 x Vanderbilt™ Reader Interfaces installed and connected; 1 x Vanderbilt™ system controller installed and connected; 1 x 7Ah battery installed and connected with a second still to be fitted. Door tamper switch installed and connected.

Part No.	Power Outputs	Housing Type	Housing Size (h x w x d)	Total Battery Size to fully recharge within 24 hrs
D1460-C	9 x 1A + 1A battery charging	C-Box	345 x 430 x 90mm	24Ah
D1460-E	9 x 1A + 1A battery charging	E-Box	500 x 405 x 90mm	24Ah
D1460-G	9 x 1A + 1A battery charging	G-Box	687 x 456 x 116mm	24Ah
D1462-E	18 x 1A + 2 x 1A battery charging	E-Box	500 x 405 x 90mm	2 x 24 Ah
D1462-G	18 x 1A + 2 x 1A battery charging	G-Box	687 x 456 x 116mm	2 x 24Ah
D1460-P	9 x 1A + 1A battery charging	PCB-only	PCB footprint size 170mm x 157mm x 66mm	24Ah

D1460 Major System Power Solutions

12VDC 10A +(9A + 1A) Switched-Mode Power Supply

BASIC POWER MODULE SPECIFICATIONS	
AC Input Voltage	230VAC ±10%, 50Hz.
SMPS PSU protection	Hysteric over-temperature and over-voltage protection
Maximum Input Continuous Current	1A @ 230Vac
Peak inrush current limit	20A (maximum) @12Vdc
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 Outputs = 3 x Opto Relays for AC, battery and PSU fault	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 +50°C, 95% maximum humidity, non-condensing
PCB Footprint Dimensions (h x w x d)	170mm x 157mm x 66mm

Dycon Power Solutions Ltd

Unit A, Cwm Cynon Business Park, Mountain Ash, CF45 4ER, United Kingdom.

For more information about the Dycon range of power products:

www.dyconpower.com

Or to discuss specific needs:

+44 (0)1443 471 900

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.

D1460-range data sheet/V5/110619