G-Box

Extra Large Multi-Purpose Steel Housing for Dycon Power Supply Modules, System Peripherals, 3rd Party devices & Access System Controllers

Designed and manufactured in the UK

Standard white G-box, an optional black version is also available

A G-box fitted with a Dycon D1460 10A PSU and a 17Ah VRLA battery, showing the hinged module platform and the ample space for extra peripherals, cables & more batteries

- Tough steel construction
- Extensive choice of power modules
- Wide range of system peripherals
- Optional fixing plates
- Pre-drilled back simplifies adding peripherals

- Pre-drilled to accept control modules supplied by major access system manufacturers
- Space for 2 x 26Ah or up to 4 x 17Ah VRLA batteries
- 16 x side, 2 x top & 6 x bottom 20mm knock-outs
- Optional front and back anti-tamper kits

The G-box is the perfect one-stop-shop for all access control system installations. Totally flexible power options, with or without battery standby charging and space for 3rd party devices and expansion modules. The G-box, Dycon's largest multi-purpose, steel housing, is available ready-assembled with a range of 12VDC & 24VDC power modules from 1A to 20A, it has space for 2 x 26Ah or up to 4 x 17Ah batteries and a wide range of Dycon accessories yet still has ample space to fit 3rd Party modules, without cramping cables or connections. Pre-drilled fixing holes are provided for all standard Dycon peripheral options including 4 & 8-way output splitters, relay output modules, fire interface relays, dual redundancy modules, mains filters, front and back anti-tamper switches, DIN-rails, cable management fittings and IP4x rated safety enclosures. Pre-drilled holes are also provided for a whole range of 3rd Party access control devices such as door controllers, expansion modules and system controllers from leading brands including Access Security Products™, ControlSoft™, Honeywell™, Lenel™, Mercury™, S2™, Sensor Access™, Gallagher, Paxton™ and Vanderbilt™ This flexibility means that changing from one make controller to another no longer needs a new housing, just swap modules.

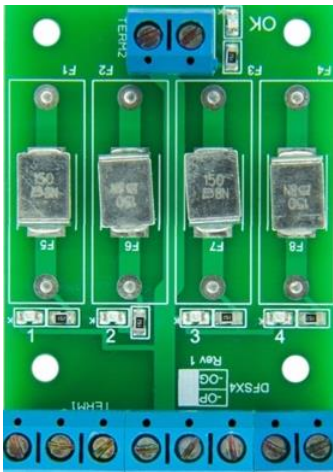# DYCON
power solutions

G-Box main features

A G-box has a unique, hinged, module platform that enables extra modules to be fitted on top of those already installed on the base-plate. These can be accessed and serviced easily when the platform is raised

- Pre-drilled to accommodate rapid fixing or change-over of most Dycon Power Modules from 0.5A -20A including EN50131 Grade 1 - 4 versions.

- Every G-box is ready to accept the following Dycon System Accessories and extensions: -
  - D15X8, 8-way output splitter module
  - DFSX4-0P, 4-way output splitter module
  - D15X4-BNC 4-way output splitter with BNC sockets for CCTV products
  - DFR-1-12, 12VDC & DFR-1-24, 12VDC & 24VDC universal output relay / fire relay modules
  - EN50131 Grades 1-3 anti-tamper kits; 2 x TAMPERKIT-02 are needed to comply, one for the front & one for the back
  - D2500, dual PSU's redundancy module
  - Mains power connector block with removable fuse

- The housing is pre-drilled to accept and can accommodate control and extension modules from most major access control and building management (BMS) systems including the following:

  - Access Security Products™ ASP-8000™
  - Axis™
  - Axxess Identification™
  - Centre Access™
  - Control Soft™
  - Gallagher™
  - HID™

  - Honeywell™ Tema module
  - Lenel S2™
  - Mercury™
  - Paxton™
 - Software House™
  - Vanderbilt™/ACT™pro-100 and pro120

To help speed up installation, Dycon fixing kits for these modules can also be supplied

G-Box main features

- Fixing holes provided for Dycon's CMS01-350 cable management systems to help group and arrange cables
- To make cabling even easier, 24 x cable knock-outs are provided.
  - The top has 2 x 20mm, the bottom 6 x 20mm, and each side has 8 x 20mm
- A knock-out is also provided at the top to allow for a standard GSM antenna to be fitted and connected to secure signalling devices.
- Once the door is removed, the sides can also be removed to allow easier cabling.
- Anti-tamper kits are available, these are activated by opening the lid and can also detect removal-from-the-wall and are compliant with IPX-rating and EN50131 Grades 1, 2 & 3.
- The G-Box is secured by a keylock, all are keyed-alike and supplied with two keys
- Versions are available with standard 165mm NS35/7.5 'Top-Hat' DIN-Rails already fitted.
- Standard finish is a white, powder-coated, spray paint, heat-treated to provide a durable, wipe-clean surface.
- Black, scratch-resistant paint is also available as an option.
- Custom paint colours can be accommodated if that colour is available in the type of paint used by our manufacturing process and subject to a minimum quantity of 50. Longer lead times will apply.
- There is sufficient space for 2 x 26Ah or up to 4 x 17Ah VRLA batteries
- Each G-Box is supplied with an Earth lead.
- A mains filter for additional protection is also available
- A separate mains block with removable fuse can also be supplied
- To enable a 12VDC or 24VDC output to be split into fused 4 or 8-separate circuits, a Dycon 4-way or 8-way output splitter can easily be fitted.
- A 12VDC or 24VDC relay module that switches the output power if the input is opened or closed is available

The DFX4-0P is a 4-way splitter fitted with PTC resettable fuses
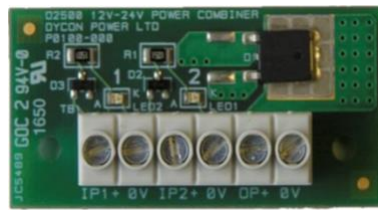
Dycon's D2500 Dual PSU Redundancy Switcher Module is a unique, practical solution to the problem of maintaining the 12/24VDC power supply to a secure infrastructure system when the unforeseen failure of single power supply unit would seriously damage its operation. Connect a D2500 to two separate, 'hot-on-line' Dycon Power Supplies, and, if the main unit fails, it will automatically, and seamlessly, switch to the other unit
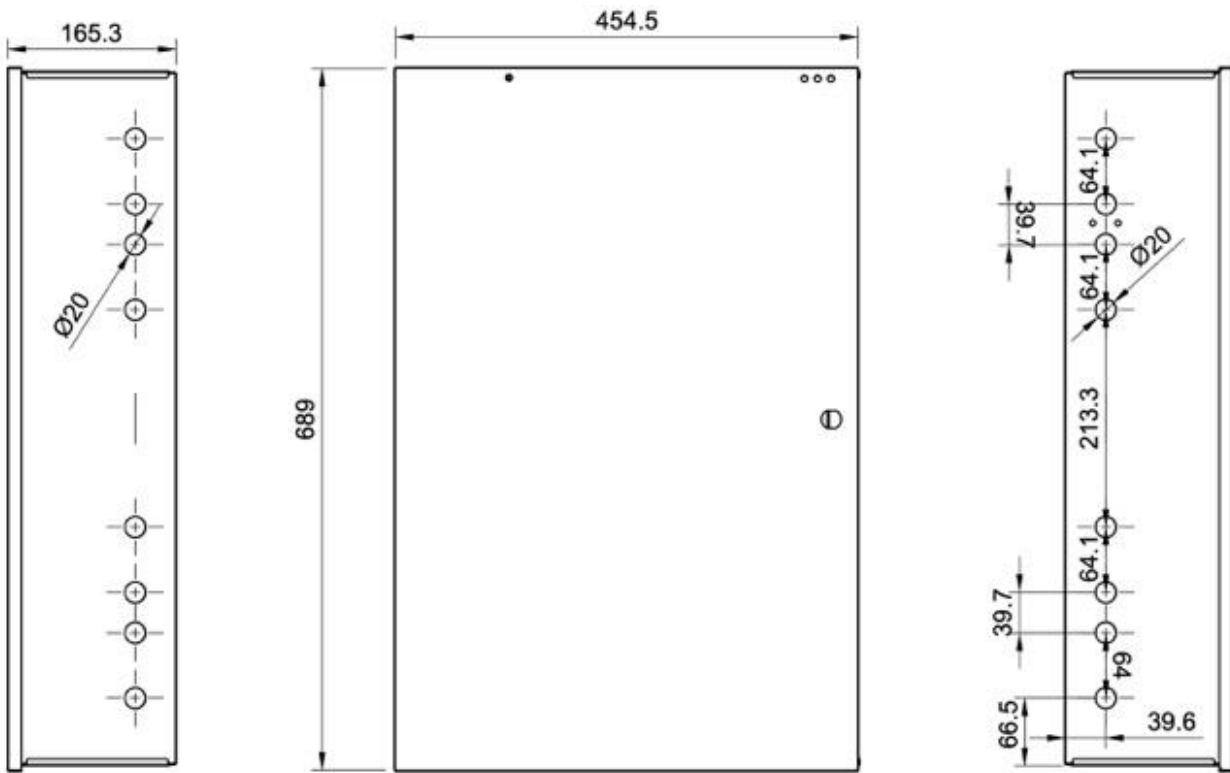

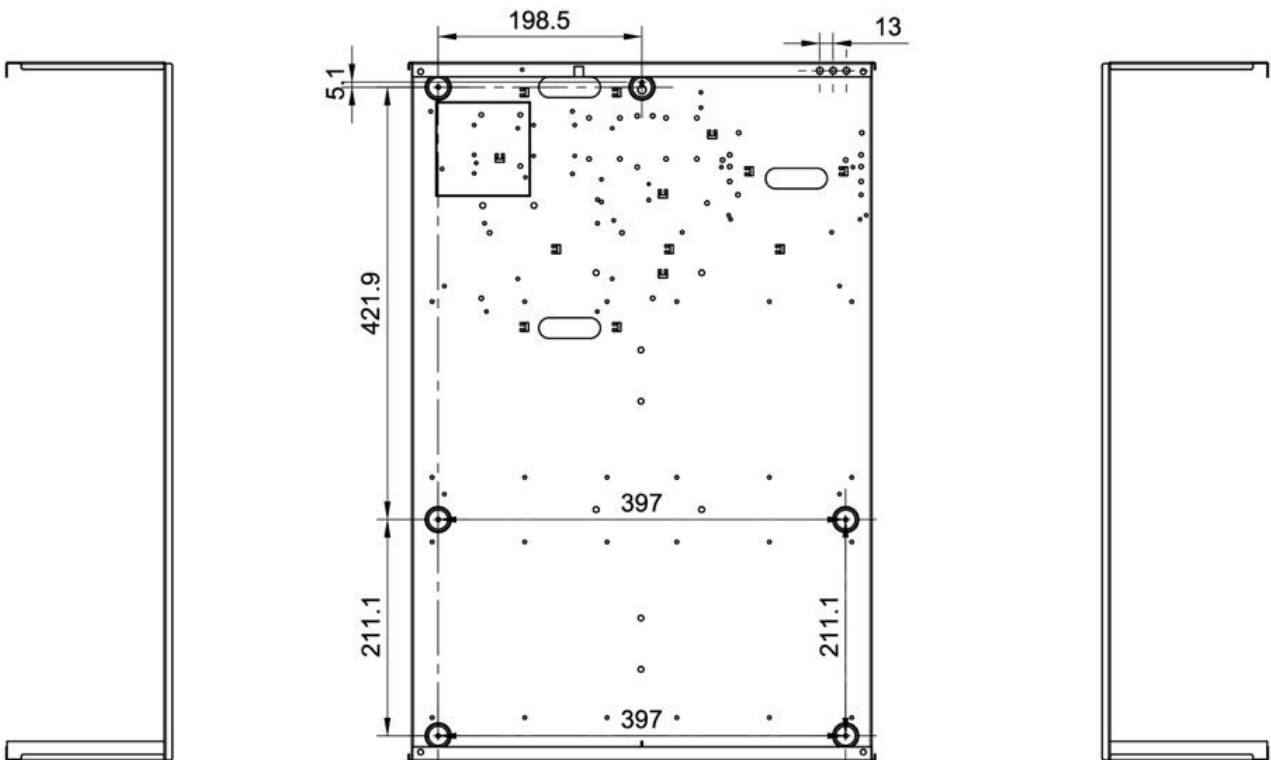*The DFR-1-12 12VDCand DFR-1-24 24VDC relay modules are ideal for use as fire relays on access control systems*

The D15X8 is an 8-splitter fitted with either 500mA or 1A standard glass fuses
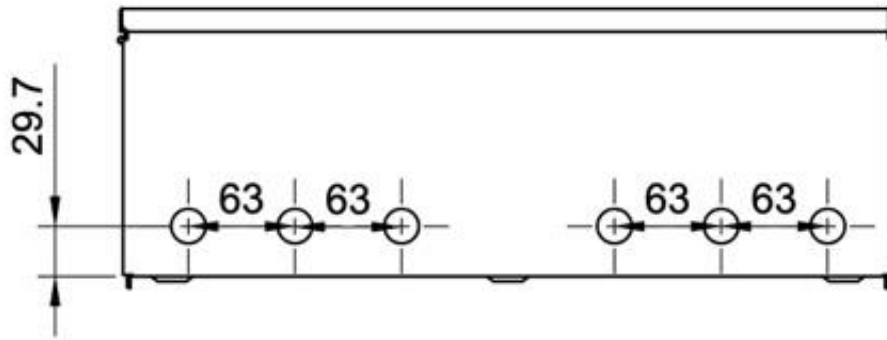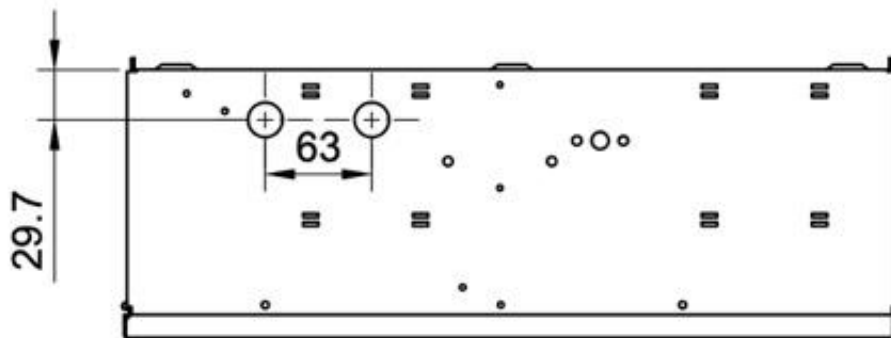
G-Box Dimensions

Base and lid dimensions

Rear fixing holes positions, knockout and LED positions and sizes

Top & Bottom knockout positions and sizes
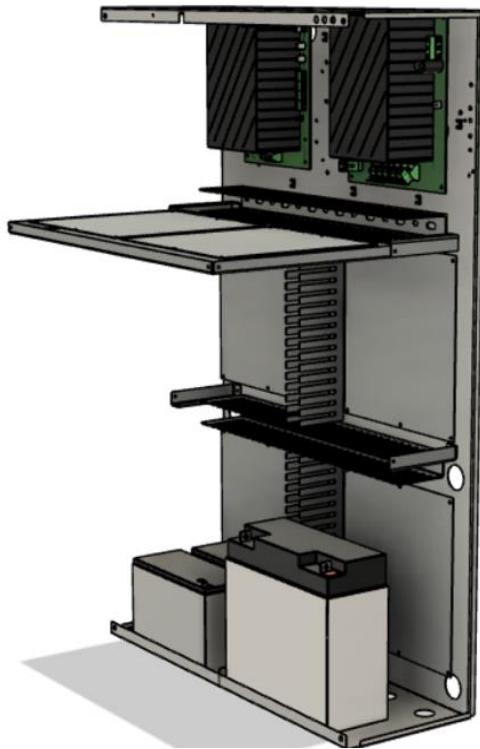

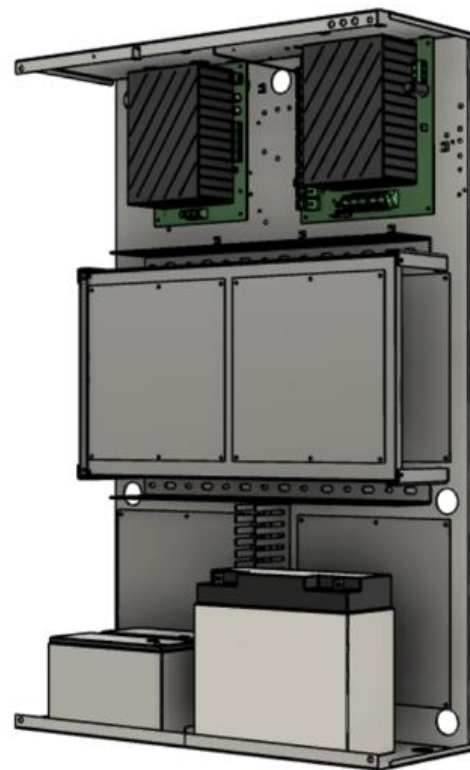Bottom side

29.7

63   63   63   63

Top side

29.7

63

G-Box layout examples

The unique hinged, module platform enables extra modules to be fitted on top of those already installed on the baseplate. This is shown in the open position allowing access to the lower controller modules without the need to disconnect anything

When installation or servicing is complete, the module platform is hinged down and secured. 6 x large (180mm x 180mm) access system controllers can be fitted in the same space as four normally. CMS01-350 cable management systems are also fitted to ensure that cables are neatly grouped and secured
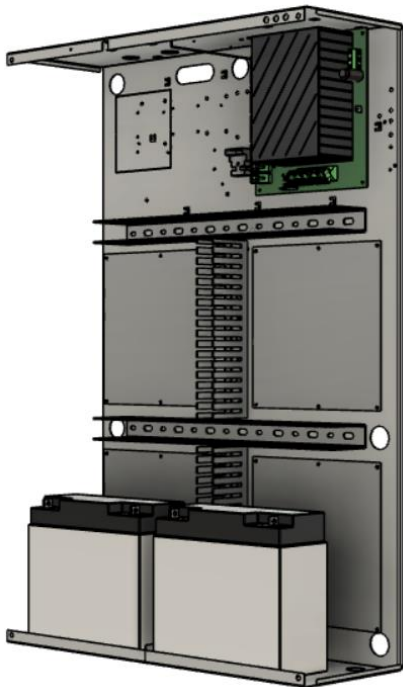
G-Box layout examples
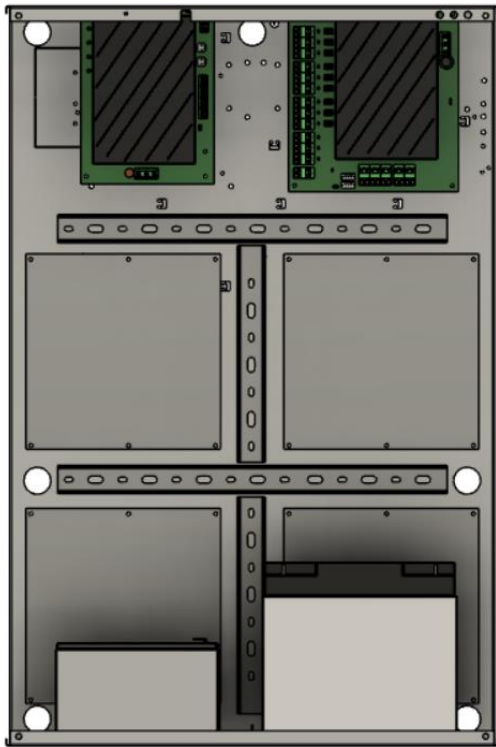
A dual-voltage example showing a 24VDC 5A PSU with 2 x 7Ah batteries on the left, & a 12VDC 9A PSU, with a 17Ah battery on the right.
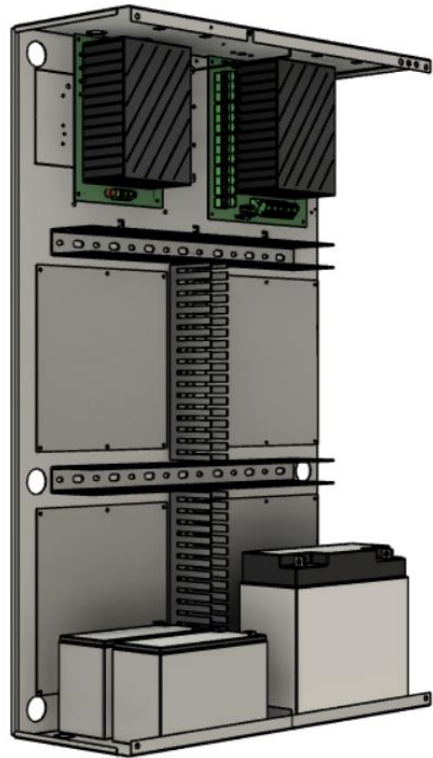
Dycon CMS01-350 cable management systems are fitted to group & arrange cabling to all points. Space for 4 x large (180mm x 180mm) access system controllers and pre-drilled positions for accessory modules

The sides can be removed during installation or servicing, making cabling easier. This view also shows the pre-drilled holes for ancillaries & communication devices
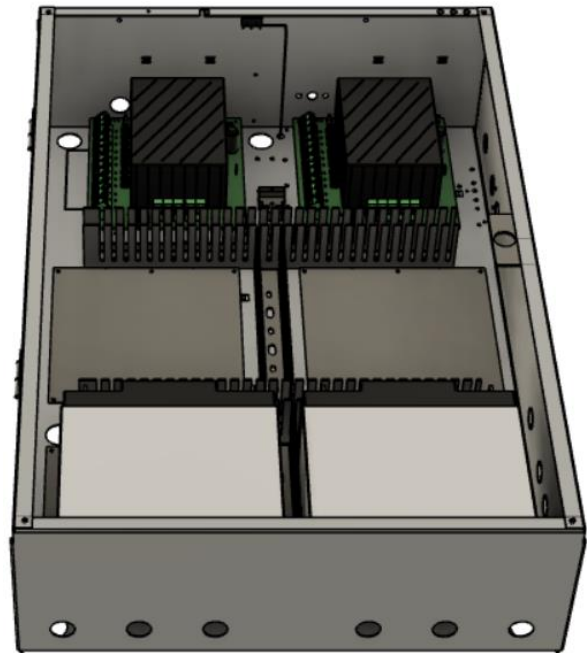
A 12VDC 18A example with 2 x 12VDC 9A PSUs and 2 x 17Ah batteries. This version still has space for 4 x large (180mm x 180mm) access controllers, or 6, if the hinged module platform is used

Table 1   Dycon G-Boxes with pre-installed power supplies

Part No.	Power Supply Type	Battery Charge	EN 50131 Grade	Fault Outputs or indications	Remote Switching Input
D1410-G *3	12VDC, 10 x 1A or 1 x 10A	No	No	Output tripped LED only	No
D1460-G *3	13.8VDC 9 x 1A + 1A battery charging	Yes	No	Yes	Yes
D1461-G *3	13.8VDC 18 x 1A + 1A battery charging	Yes	No	Yes	Yes
D1521-G *3	13.8VDC 1A	Yes	Grade 2	Both	No
D1522-G *3	13.8VDC 2A	Yes	Grade 2	Both	No
D1532-G *3	Smart 13.8VDC 3A	Yes	Grade 3	Both	No
D1541-G *3	13.8VDC 1A	Yes	No	Indicators only	No
D1542-G*3	13.8VDC 2A	Yes	No	Indicators only	No
D1543-G *3	13.8VDC 3A	Yes	No	Indicators only	No
D1545-G *3	13.8VDC 5A	Yes	No	Indicators only	No
D1553-G *3	Smart 13.8VDC 3A	Yes	No	Both	Yes
D1555-G *3	Smart 13.8VDC 5A	Yes	No	Both	Yes
D1565-G *3	Constant Voltage, 12-15VDC 5A	Yes	No	No	No
D1573-G *3	12VDC 3A	No	No	Output only	Yes
D1575-G *3	12VDC 5A	No	No	Output only	Yes
D1632-G *3	13.8VDC 3A 110VAC	Yes	No	Both	No
D2401-G*3	24VDC 1A	No	No	Output only	No
D2402-G *3	24VDC 2A	No	No	Output only	No
D2403-G *3	24VDC 3A	No	No	Output only	No
D2412-G *3	24VDC 2A	Yes	No	No	No
D2413-G *3	24VDC 3A	Yes	No	No	No
D2441-G *3	Smart 27.6VDC 2A	Yes	No	Both	Yes
D2443-G *3	Smart 27.6VDC 3A	Yes	No	Both	Yes
D2445-G *3	Smart 27.6VDC 5A	Yes	No	Both	Yes
D2904-G *2 *3	27VAC 4A (4 x 1A)	No	No	No	No
DR-60-5-G *1 *3	90-264VDC, 5VDC 6.5A output, DIN-rail mount	No	No	No	No
DR-60-12-G *1 *3	90-264VDC, 12VDC 5A Output, DIN-rail mount	No	No	No	No
DR-60-24-G *1 *3	90-264VDC, 12VDC 2.5A Output, DIN-rail mount	No	No	No	No
MS-60-12-G *2 *3	90-264VDC, 12VDC 5A Output	No	No	No	No
MS-75-12-G *2 *3	90-264VDC, 12VDC 6.3A Output	No	No	No	No
MS-75-24-G *2 *3	90-264VDC, 12VDC 3.2A Output	No	No	No	No
HS-600-12-G *3 *4	*See note* *4 12VDC 50A output	No	No	No	No
HS-600-24-G *3 *4	*See note* *4 24VDC 25A output	No	No	No	No
HS-600-48-G *3 *4	*See note* *4 49VDC 12.5A output	No	No	No	No

Notes: *1 *Requires DIN-rail length to be specified, see G-box Accessory options on the next page*

*2 *Supplied with an additional W-plate to which the PSU module is fitted*

*3 *To order a black version of any of the above, please change the model suffix from G to G-BK*

*4 *Input voltage selectable 190-132VAC, 180-264VAC, 255~372VDC*

Table 2 Dycon G-Box accessory options

Part No.	Description	Purpose/Feature
D2500	Dual PSU Redundancy Switcher Module. 5Amp	Combines outputs from 2 x separate PSU's & automatically switches from one to the other when a failure of one is detected
DFR-1-12	12 VDC output Relay Modules	Can be used as a Fire Relay or to control doors/gates in access system. Provides volt free or switched power. Fused
DFR-1-24	24 VDC output Relay module	Can be used as a Fire Relay or to control doors/gates in access system. Provides volt free or switched power. Fused.
DFRSX4-0P	4-way Splitter	12VDC/24VDC Electronically fused, 4-way output current splitter
DFRSX4-0G	4-way Splitter	12VDC/24VDC Replaceable 1A fuses, 4-way output current splitter
D15X4-BNC	4-way BNC Output Splitter	12VDC/24VDC Replaceable 500mA fuses, 4-way output current splitter into 4 x BNC sockets & with video loop-through capability
D15X8-500mA	8-way Splitter	12VDC/24VDC Replaceable 500mA fuses, 8-way output current splitter
D15X8-1A	8-way Splitter	12VDC/24VDC Replaceable 1A fuses, 8-way output current splitter
DMFILTER01	Mains LCR Filter	LCR filters helps to protect equipment from spikes and surges
CMS01-350	Cable Management System	Keeps multiple cables in a housing separated from the other components and kept tidy. 50 mm (h) x 25mm (w), length 350mm
DIN007	270mm length DIN-rail	270mm DIN-rail for installing devices and accessories fitted with TS-35/7.5 or TS35/15 DIN-rail mountings
DIN008	160mm length DIN-rail	160mm DIN-rail: for installing devices and accessories fitted with TS-35/7.5 or TS35/15 DIN-rail mountings
DIN009	80mm length DIN-rail	80mm DIN-rail: for installing devices and accessories fitted with TS-35/7.5 or TS35/15 DIN-rail mountings
Tamperkit-02	Front or Back Anti-tamper kit	Tamper switch with cable and fixing. Two required, one front & one back, to provide EN50131 Grades 2 & 3 compliance
DY-FIX-001	PCB Fixing set	4 x Hex stand of 10 mm with M3 x6 screw for fixing third party products in housing.
CAB002	Battery cable small spade 500 mm	Fitted with T1 4.75mm narrow spade connectors for 7Ah Sealed lead acid gel batteries, 500 mm length
CAB037	Battery cable M5 O ring 750 mm	Fitted with M5 Screw-type connectors for 17Ah & Larger Sealed lead acid gel batteries, 750 mm length
CAB003	Mains fuse block	Mains block connector with removable fuse holder

Dycon G-Box specifications

Construction	1.2mm steel
External Dimensions (H x W x D mm)	690 x 455 x 165mm, including fixings
Weight	9.50 kgs
Standard Colour & finish (Part No. G)	White RAL9003, powder-coated paint.
Optional black version (Part No. G-BK)	Black RAL9005, powder-coated, scratch resistant paint
Lid fixing	Keylock, supplied with 2 keys, keyed alike