

# Dycon 24VDC Range

## D2441, D2443, D2445



**‘Smart’ Switched-Mode 1, 3 & 5A Power Supplies Suitable for Access Control, Fire Systems & General 24VDC Applications**



- 24VDC 1, 3 & 5A power supplies with battery charging
- Micro-processor monitored and controlled
- Battery discharge protection
- Remote ON/OFF switching capability
- 3 x opto-relay fault outputs
- 4 x status LED's
- 2 x 12VDC battery input sockets
- Self-resetting, electronically fused output

These 24VDC ‘Smart’ switched-mode power supplies units these units’ feature a switchable ON/OFF output capable of switching highly inductive loads (fire door retainers, magnetic/electric door strikes and locks) and removing the chance of inductive kickback blowing a fuse and causing a door to remain closed or open, a frequent cause of personnel delays and expensive engineer call outs. Separate battery connectors allow 2 x 12VDC batteries to be directly connected without the need for an additional jumper. The range also features intelligent and capacitive load switching surge protection and snubbing and all include a jumper for simple selection of inverted or normal power switching input operation. They have three, volt-free, opto outputs for remotely signalling the status and serviceability of the unit. These outputs can be used to indicate problems either locally or remotely via a suitable signalling device. A Four x LED Matrix provides detailed information of up to ten different faults and indications making fault finding quicker and easier.



**DYCON**  
power solutions

# D2441, D2443 & D2445

## 24VDC 'Smart' Switched-Mode Access Control Power Solutions

### Specification

Power Supply Classification	Type A, Ungraded, Environmental Class 2
Voltage Input	195VAC- 265VAC @ 50-60Hz
AC Input Fuse	D2441 - 2A, D2443- 3.15A, D2445- 3.15A
Output Voltage with AC Power	Max. 28VDC, min. 20.0VDC, 27.4VDC with AC present
Output Ripple	< 0.6V peak-to-peak @full rated output
Max. Output Current at Full Load	D2441 - 1A; D2443 - 3A; D2445 -5A
Battery Charging Current at Full Load	300mA max @27.4VDC float charge current
Power Consumption at Full Load	D2441 - 33W, D2443- 97W, D2445- 162W
Fault Opto-Relay Rating	60V @ 100mA, 14ohms closed
Efficiency	>80% at full load
Maximum overvoltage cut-out	29VDC $\pm$ 3%,
Low battery fault	22VDC $\pm$ 3%
Low-voltage power output fault	24.6VDC $\pm$ 3%
Battery deep discharge voltage limit	20V $\pm$ 3%
Automatic output reset time * <sup>1</sup>	10mS to 18s
Operating temperature range and humidity	-10°C to +50°C 95% non-condensing

Note: \*<sup>1</sup> Depending on the nature and duration of the fault

Housing Type	1 Ampere version Part No	3 Ampere version Part No.	5 Ampere version Part No.	Maximum space for batteries	Housing & PCB Size h x w x d (in mm)	Housing weight (in kg)
B-box	D2441-B	D2443-B	D2445-B	2 x 7Ah	260 x 320 x 90	1.90
XLB-box	D2441-XLB	D2443-XLB	D2445-XLB	2 x 7Ah or 2 x 17Ah	295 x 415 x 90	2.20
C-box	D2441-C	D2443-C	D2445-C	2 x 7Ah or 2 x 17Ah	345 x 430 x 90	3.30
E-box * <sup>2</sup>	D2441-E	D2443-E	D2445-E	2 x 7Ah or 2 x 17Ah	405 x 500 x 90 * <sup>2</sup>	5.80
PCB-only	D2441-P	D2443-P	D2445-P		D2441-P = 140 x 108 x 42 D2443-P = 140 x 122 x 43 D2445-P = 164 x 123 x 64	D2441-P = 0.17kg D2443-P = 0.28kg D2445-P = 0.37kg

Note: \*<sup>2</sup> Larger housings are available if more space is needed, please contact Dycon for more details.

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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.

D2441/3/5 data sheet 18072022 V11