

FLATPACK DC/DC 24/48

DC/DC Converter



POWERFUL TECHNOLOGY

Flatpack



The Flatpack DC/DC 24/48 is a modular hot plug-in DC/DC converter prepared for stand-alone use, or for working in parallel as part of a DC/DC rack system.

The converter is specially designed to provide a high quality and highly reliable DC output voltage.

Switch mode technology with soft switching and high switching frequency is used to minimise volume and weight, and to obtain fast output voltage regulation.

The module has a soft start power-up. When working in parallel, the converters provide active current sharing. An internal blocking diode allows hot plug-in and isolates any faults in the converter output from the DC-bus.

Several internal protection circuits ensure safe operation, even outside specified limits for normal operation. A module failure alarm is given if the module shuts down due to high/low input voltage, high output voltage (selective), or in case of an internal failure.

Converters connected in parallel will exhibit active load sharing, even without a Monitoring & Control Unit.

Front LED's show power ON/OFF and alarm status in addition to a LED bar graph for output current indication.

The Flatpack DC/DC 24/48 will operate in ambient temperatures up to +75°C (+167°F). At temperatures above +65°C (+149°F), the output power may be derated.

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SPECIFICATIONS

INPUT

Input Voltage range	19.8 VDC-30 VDC
Maximum Current	62 Amps at 19.8 VDC input
Protection	Soft start Surge protection Internal fuse Automatic shutdown for input voltages < 19.5 VDC and > 30 VDC

OUTPUT

Output Voltage	55 VDC (preset) 43-59 VDC adjustable
Output Power	1100 W
Output Current	23 Amps at 48 VDC
Current Share	± 5% from true average current
Static Voltage Regulation	±0.5% from 0 to full load
Dynamic Voltage Regulation	±1.0% for 10-90% or 90-10% load variation
Hold Up Time	> 10 ms
Ripple and Noise	<100 mV peak to peak, 0-20 MHz
Protection	Oring diode Non-destructive short circuit operation and selective high output voltage shutdown (59,5V)

OTHER SPECIFICATIONS

Isolation Voltages	Primary/ Secondary: 1910 VDC Primary/ Chassis: 1910 VDC Secondary/ Chassis: 1910 VDC
Converter alarms	No output voltage Overvoltage shutdown Fan failure High temperature shutdown Short circuit/ fold back activated
Converter warnings	DC input voltage out of range Single fan failure High temperature/ derating activated Current limit
Visual indications	Green LED: ON, no faults Red LED: No output, converter failure Yellow LED bargraph: measuring output current (0-100%)
Efficiency	90% at full load
Operating Temp	-40°C to +65°C (-40 to +149°F) +65C to +75 °C (+149 to +167°F): Temperature dependent power limiting may occur
Storage Temp	-40 °C to +85 °C (-40 to +185°F)
Cooling	Speed controlled fans
Acoustic Noise	<60dBA
Dimensions	218 x 43 x 240mm (wxhxd) (8.58 x 1.69 x 9.45")
Weight	3 kg (6.6lbs)

APPLICABLE STANDARDS

Applicable Standards	IEC 60950/ EN 60950/ UL 60950 IEC 60215/ EN 60215/ BS3192 EN 300 386 EN 301 489-1/-8/-23 ETS 300 019 ETS 300 132-2 ETS 300 753 Bellcore GR-63-CORE, zone 4
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Specifications are subject to change without notice.

ORDERING INFORMATION

Part no.	Description
241114.500	Flatpack DC/DC 24/48 converter

241114.500.DS3 v.01



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Location

Norway
Americas
Asia/Pacific
China
Europe
Middle East

Company

Eltek Energy AS
Eltek Energy, LLC
Eltek Energy Pte Ltd.
Eltek Energy Ltd.
Eltek Energy UK Ltd.
Eltek Middle East

Telephone

+47 32 20 32 00
+1 815 459 9100
+65 6 7732326
+852 28982689
+44 1442 219355
+971 4 887 1176

Fax

+47 32 20 32 10
+1 815 459 9118
+65 6 7753602
+852 28983189
+44 1442 245894
+971 4 887 1175