

Flatpack | DC/DC 48/190

Switch Mode DC converter



POWERFUL TECHNOLOGY

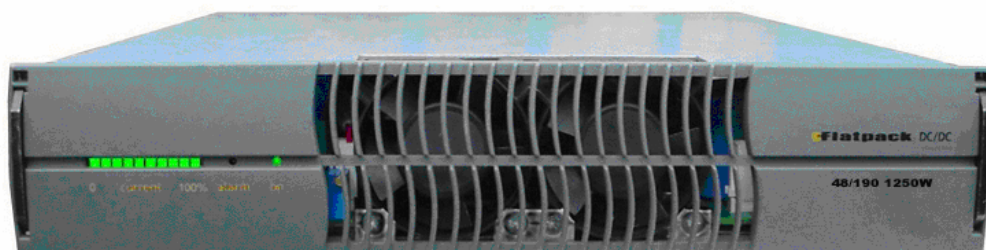


The Flatpack DC/DC 48/190 is a modular hot plug-in DC-DC converter prepared for stand-alone use, or for working in parallel as part of a DC-DC rack system. The converter is especially designed to provide a high quality and highly reliable DC output voltage.

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

The Flatpack DC/DC 48/190 will operate in ambient temperatures up to +65°C. It delivers maximum output power up to an ambient temperature of +65°C. At higher temperatures, the converter may de-rate the output power until it goes into an over-temperature shutdown.



FLATPACK DC/DC 48/190		OTHER SPECIFICATIONS	
SPECIFICATIONS		Efficiency	> 90%
INPUT		Isolation	3.0 KVAC – input and output 1.0 KVDC – input earth 1.5 KVAC – output earth
Input voltage	37-64Vdc	Rectifier Alarm	Internal Alarm relay Module failure Over voltage shutdown Fan Failure
Maximum Current	28.9A at 48Vdc input	Visual indications	Green LED: ON, no faults Red LED: Rectifier failure Green LED bargraph: 10 LEDs showing load current (0-100%)
Input protection	Soft start Internal fuses (L & N) Under voltage lock out	Operating temp	-40 to +65°C (-40 to +149°F)
OUTPUT		Storage temp	-40 to +85°C (-40 to +185°F)
Voltage	100-190VDC (190VDC preset)	Cooling	2 fans, front to back airflow Brushless w/ magnetic bearing Temperature controlled fan speed
Output power	1250W	MTBF	> 200,000 hours Telcordia Issue I, method III (a)
Maximum current	6.6A	Acoustic Noise	< 60dBA
Current share	± 5% from true average	Humidity	Operating: 5% to 95% RH non-condensing Storage: 0% to 99% RH non-condensing
Static voltage regulation	±0.5% from 0 to full load	Dimensions	214 x 41.5 x 243mm (wxhxd) (8.43 x 1.64 x 9.57")
Dynamic voltage regulation	±1.0% for 10-90% or 90-10% load variation	Weight	2.8kg (6,61lbs)
Ripple and Noise	< 100 mV peak to peak, 30 MHz bandwidth < 0.96mV rms psophometric	APPLICABLE STANDARDS	
Output Protection	Over voltage shutdown Blocking diode Short circuit proof High temperature protection	Electrical safety	EN 60950 (pending) UL 60950 (pending) Telcordia GR-1089-CORE (pending)
		EMC	ETSI EN 300 386 V.1.3.1 EN 61000-6-3 (emission) EN 61000-6-2 (immunity) Telcordia GR-1089-CORE
		Environment	ETSI EN 300 019-2 ETSI EN 300 132-2 Telcordia GR-63-CORE Zone 4

Specifications are subject to change without notice.

ORDERING INFORMATION

Part no.	Description
241114.501	Flatpack DC/DC 48/190

241114.501.DS3 v.00

Location	Company	Telephone	Fax
Europe	Eltek Energy AS	+47 32 20 32 00	+47 32 20 32 10
Americas	Eltek Energy, LLC	+1 815 459 9100	+1 815 459 9118
Asia/Pacific	Eltek Energy Pte Ltd.	+65 6 7732326	+65 6 7753602
China	Eltek Energy Ltd.	+852 28982689	+852 28983189
Middle East	Eltek Middle East	+971 4 887 1176	+971 4 887 1175