

Complementing the total green telecom site!

The Flatpack2 48/3000 HE WIND brings another renewable energy source into the Flatpack2 family of DC power system for telecom applications.

Configurable loading of the wind turbine allows for maximum utilization of most 2-10kW wind turbines in all conditions. This galvanic isolated wind charger's high efficiency, up to 95%, reassures as much as possible of the renewable energy is transferred to the telecom load and batteries.

Eltek provides Return-on-Investment (ROI) and total cost of ownership simulations using professional tools and wind measurements at site.



FLATPACK2 48/3000 HE WIND

WIND CHARGER

Doc 241119.550.DS3 – v5

APPLICATIONS

TELECOM – MOBILE / WIRELESS

- MOBILE / WIRELESS
- RADIO BASE STATIONS/ CELL SITES
- BACKHAUL
- MICROWAVE
- BROADBAND

TELECOM – FIXED

- TELEPHONY SERVERS / SWITCHES
- FIBER OPTICS
- MICROWAVE
- CABLE
- BROADBAND
- BROADCAST



WINDCHARGER IN 1U WIND SHELF (P/N 285762)



FLATPACK2 SYSTEM IN TYPE3 OUTDOOR CABINET

KEY FEATURES

- HIGH EFFICIENCY
- MAXIMUM UTILIZATION FOR MOST WIND TURBINES
- TELECOM SPECIFICATION
- FULLY INTEGRATED IN ELTEK CONTROL SYSTEM
- LOGS WITH WIND ENERGY PRODUCED
- GLOBAL COMPLIANCE
- PATENTED HE TECHNOLOGY



SMARTPACK2 AND FLATPACK2 HYBRID POWER CORE

FLATPACK2 48/3000 HE WIND

WIND CHARGER

Model		48/3000 HE WIND
Part number		241119.550
INPUT DATA		
Voltage (nominal)		125 - 212 V _{AC} (3ph line to line) / 176 - 300 V _{DC}
Voltage (range)		60 - 212 V _{AC} (3ph line to line) / 85 - 300 V _{DC}
Frequency		45 ¹⁾ - 66 ¹⁾ Hz / 0Hz
Current (maximum) @ nominal input, full load		16 A _{RMS line}
Protection	Fuse	
OUTPUT DATA		
Voltage (default)		53.5 V _{DC}
Voltage (adjustable range)		43.5 - 57.6 V _{DC}
Power (maximum)		3000 W
Power @ 60 V _{AC} / 85 V _{DC}		1380 W
Current (maximum) @ nominal input, full load		62.5 A
Static Voltage regulation (10 - 100% load)	±0.5%	
Dynamic Voltage regulation	±5.0% for 10-90% or 90-10% load variation, regulation time < 50ms	
Ripple	< 200 mV peak to peak, 30 MHz bandwidth	
Protection	Fuse Short circuit proof High temperature protection	
OTHER SPECIFICATIONS		
Efficiency	Up to 95.5%	
Isolation	3.0 kV _{AC} - input to output 1.5 kV _{AC} - input to earth 500 V _{DC} - output to earth	
Alarms: Red LED 'on'	Low input voltage shutdown, High and low temperature shutdown, Converter Failure, Overvoltage shutdown on output, Fan failure, Low voltage alarm, CAN bus failure	
Warnings: Yellow LED 'on'	Converter in power tracking mode, Control system current limit activated, Input voltage out of range, flashing at overvoltage	
Normal (module running): Green LED 'on'		
Acoustic noise	< 46dBA at nominal input and full load	
Operating temperature	-40 to +75°C (-40 to +185°F), humidity 5 - 95% RH non-condensing Output power de-rates linear from 3000W @ 45°C (113°F) to 2100W @ 75°C(167°F)	
Storage temperature	-40 to +85°C (-40 to +185°F), humidity 0 - 99% RH non-condensing	
Dimensions[WxHxD] / Weight	230 x 41.5 x 327mm (9.06 x 1.69 x 13") / < 5 kg (11 lbs)	
DESIGN STANDARDS		
Electrical safety	EN 60950-1	
EMC	ETSI EN 300 386 V.1.6.1 EN 61000-6-1 / -2 / -3 / -4	
Environment	ETSI EN 300 019: 2-1 (Class 1.2), 2-2 (Class 2.3) & 2-3 (Class 3.2) ROHS compliant	
1) The converter does support a wider frequency range, but may have de-rated maximum power for lower frequencies. Each wind mill model must be approved by Eltek before deployment.		

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Specifications are subject to change without notice