Meeting all Data Centre Power Needs

The Eltek Converged Power System (DCPS) is the ultimate combination of flexibility, availability, and sustainability, providing a unique modular architecture that will solve any present and future power need.

Whatever the load requirements, or voltage levels, AC and DC, all can be provided by the same infrastructure.

Using industry leading high efficiency power conversion modules, innovative design and comprehensive monitoring and control features to fully optimize the potential of the power infrastructure.

CONVERGED POWER SOLUTIONS

FLEXIBLE POWER SYSTEMS UP TO 432KW

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PRODUCT DESCRIPTION

The Eltek Converged Power System is built around the Flatpack2 High Efficiency (HE) power converter modules which are used in a wide variety of power critical applications, including; Telecoms; Power Generation; Rail; Marine & Offshore; Oil & Gas; and other demanding industries requiring long term, reliable performance.

Using novel designs to reduce the overall power infrastructure costs, while securing availability through innovative modular based power solutions, the converged power platform provides maximum flexibility and scalability to enable a 'build as you grow' philosophy.

The power platform also includes the ability to simply integrate a variety of renewable energy sources to complement traditional utility supplies.

Smartpack2 system controller

Flatpack2 HE converter

KEY FEATURES

- WORLD'S HIGHEST AVAILABILITY
- FUTURE PROOF COMPACT DESIGN
- MODULAR 'HOT PLUG-IN' DESIGN FOR ULTRA LOW MTTR (<5 MINS) & CONFIGURABLE REDUNDANCY
- OPTIONAL DUAL AC SOURCE SYSTEM
- FLEXIBLE POWER MANAGEMENT TO PRECISELY TRACK IT CLOUD LOADS FOR OPTIMAL ENERGY USAGE
- REDUNDANT CONTROLLERS FOR INCREASED RELIABILITY
- EXTENSIVE ALARM & CONTROL FACILITIES INCLUDING REMOTE CONTROL CAPABILITIES
- FLEXIBILITY FOR MULTI DC OUTPUT VOLTAGES AND AC OUTPUT VOLTAGES
- INDUSTRY LEADING EFFICIENCY: LOWER POWER CONSUMPTION & HEAT DISSIPATION

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DC OUTPUT POWER CONVERSION

Output: 48V; 220V; 380V
Basic system capacity: 36kW
Monitoring: Full system parameter monitoring & control
Expandability: up to 432kW
Cabinet dimensions: W600xD600xH2000mm (multiples of)
Optional paralleling distribution cabinets on left and right side
Operating temperature: 40°C

Specifications are subject to change without notice

DC OUTPUT POWER CONVERSION

AC OUTPUT POWER CONVERSION

AC OUTPUT POWER CONVERSION

Output: 230/400Vac; 50Hz or 60Hz
Basic system capacity: 20kW
Monitoring: Full system parameter monitoring & control
Expandability: 400kW
Cabinet dimensions: W600xD600xH2000mm (multiples of)
Optional paralleling distribution cabinets on left and right side
Operating temperature: 40°C

Specifications are subject to change without notice

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DISTRIBUTION CABINETS

VDC 1200A: up to 48x 2-pole positions up to 8x 250A bulk MCCBs	
VAC 500A: up to 72x 1-phase MCBs (up to 24x 3-phase) up to 4x 250A 3-phase bulk MCCBs	
Monitoring: Load monitoring per output Breaker trip	
Expandability: As required for load outputs	
Cabinet dimensions: W600xD600xH2000mm (multiples of)	
Optional paralleling distribution cabinets on left and right side	
Operating temperature: 40°C	

Specifications are subject to change without notice

DISTRIBUTION CABINETS

BATTERY CABINETS

BATTERY CABINETS

Single bank capacity: Up to 178kW for 5 mins
Protection: 600A Isolator and LVBD

Monitoring: Current
                    Temperature
                    Symmetry monitoring

Expandability: As required for load and backup time
Cabinet dimensions: W600xD600xH2000mm (multiples of)
Optional paralleling battery cabinets on left and right side
Operating temperature: 30°C

Specifications are subject to change without notice

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AC INPUT	
Voltage	230 V$_{AC}$, single phase 230 V$_{AC}$, 3-phase IT network 230/400 VAC, 3-phase TN network
Frequency	45 – 66 Hz

OUTPUT	
Voltage	48Vdc 220Vdc 380Vdc 230/400 VAC, 3-phase TN network
Additional info	See Flatpack2 – 2kW 48V$_{DC}$ datasheet See Flatpack2 – 3kW 48V$_{DC}$ datasheet See Powerpack 48V$_{DC}$ datasheet

CONTROL AND MONITORING	
Monitoring Unit	Smartpack2
Local Operation	Display and keys, WEB interface via standard browser using WebPower
Remote Operation	WebPower (WEB Interface, SNMP protocol and email)
Alarm Relays (Connection: clamp ≤ 1.5 mm^2)	6 x Potential free change over contacts as standard. Optional expansion up to 160 changeover contacts
Inputs	6 x Configurable (digital, analog max 75V) Optional expansion up to 272 inputs
Alarms	Low & high output voltage alarms (Minor and major levels), Earth fault alarm, Temperature alarm, Mains outage alarm, Battery remaining capacity/low quality alarms, Battery/load breaker tripped alarm and much more. See datasheet for Smartpack2 for further information

OTHER SPECIFICATIONS	
Isolation	3.0 KVAC – input and output 1.5 KVAC – input earth 0.5 KVDC – output earth
Storage temp.	-40 to +85°C (-40 to +185°F)
Weight /per cabinet	Appr. 180kg (396,8 lbs) excl. modules

APPLICABLE STANDARDS	
Electrical safety	IEC 60950, UL 60950, IEC 62040
EMC	ETSI EN 300 386 V.1.3.1 (telecommunication network) EN 61000-6-3 (emission, light industry) EN 61000-6-2 (immunity, industry)
Environment	ETS 300 019-2-1 (storage) ETS 300 019-2-2 (transport) ETS 300 019-2-3 (operation)

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