

A compact power solution for AC & DC loads

The MiniCPS indoor system combines both AC and DC feeds into one common unit. Simultaneously delivering AC backup power for 230/400 V_{AC} loads, and 48 V_{DC} power for DC loads and battery charging.

Providing a maximum output power of 65kW from two separate, redundant, AC sources, and able to have a variable split between AC and DC loads, the system provides a comprehensive solution for sites with flexible load profiles.

Ideal for Modular Data Centers at the Edge, or for powering individual rows of equipment racks.



MiniCPS 65kW power system

Up to 75 kVA AC & up to 33 kW 48 VDC output with dual AC input

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MODULAR ARCHITECTURE

CONVERTER MODULES

The system simultaneously provides power for AC and DC loads. During a mains outage, the system seamlessly continues feeding both AC and DC loads using energy stored in the battery, until either the main, or secondary, AC source is available.

The modular architecture, industry-leading efficiency, compact size, innovative design, and comprehensive monitoring and control features, provide significant benefits over the current industry standard.



Rectifier Module

APPLICATIONS

TELECOM-MOBILE/WIRELESS

- LTE/4G/WiMAX
- Distributed antenna system
- Broadband
- Radio base stations/cell sites
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RAILWAY & METRO INFRASTRUCTURE

- Control & protection
- Signaling
- GSM-R
- Safety Systems
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POWER UTILITIES

- Control & protection
- SCADA system

KEY FEATURES

- 230 VAC SINGLE PHASE INPUT
- 400 VAC THREE PHASE (Y) INPUT
- DUAL SOURCE INPUT
- SINGLE PHASE AND THREE PHASE OUTPUT
- 48 VDC OUTPUT
- MAX 75 KVA AC OUTPUT
- MAX 33 KW DC OUTPUT
- 1 POLE AC DISTRIBUTION OPTION
- 2 POLE AC DISTRIBUTION OPTION
- -48 VDC DISTRIBUTION OPTION
- SURGE PROTECTION ON BOTH INPUT AND OUTPUT
- BUILT IN TRANSFER TECHNOLOGY
- HOT PLUGGABLE
- SMARTPACK2 CONTROLLER
- PATENTED TECHNOLOGY

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Model	75 kVA / 60 kW AC + 33 kW DC
Part number	CDEX3046.1000 + CDE33646.4000
AC OUTPUT DATA	
Voltage (default) / (adjustable range)	230 V _{AC} / 200 - 240 V _{AC}
Frequency (default inverter mode)	50 Hz (adaptive)
Frequency (set-able inverter mode)	50Hz or 60Hz
Power maximum (continuous / overload (<15s))	60 kW (75 kVA) / 112 kVA
Current maximum (continuous / overload (<15s))	10.9 A _{RMS} / 16.3 A _{RMS} per module
Current (maximum) Quick trip (20ms) ¹⁾	109 A (10 x nominal) per module
THD	< 1.5 % at resistive load
DC OUTPUT DATA	
Voltage (default) / (adjustable range)	53.5 V _{DC} / 43.5 – 57.6 V _{DC}
Power (maximum @nominal input)	33.0 kW ²⁾
Current (maximum @V _{OUT} ≤ 48 V _{DC})	687.5 A ²⁾
Hold up time, maximum output power	>10ms; V _{OUT} > 41 V _{DC}
Output features	Under and Over voltage shutdown
INPUT DATA	
AC Mains Input Voltage (1-phase / 3-phase Y)	230 V _{AC} / 400 V _{AC}
AC Current (at nominal input/output voltage)	11.46 A _{RMS} per inverter module / 19.2 A _{RMS} per rectifier module ³⁾
Frequency (default: sync range)	47-53 Hz
Frequency (set-able: sync range)	47-53 Hz, 57-63 Hz or both (adaptive)
Power Factor	> 0.99
DC Voltage nominal ⁴⁾	40 – 60 V _{DC}
DC Current (maximum)	46 A / 84A during overload (15s) per inverter module
Input features	Fuse in L and N, Hot pluggable, Varistor, AC input individual terminals for L1, L2, L3, N & PE Battery breaker (plug-in type); LVBD default
DISTRIBUTION	
LVBD	1800 A
1 pole AC distribution (L connection on MCB)	6 x 10A, 6 x 32A C default (others available)
-48 V _{DC} distribution	2 x 100A, 4 x 16A, 3 x 32A, 4 x spare
Battery inputs	4 x 600 A (fuse)
OTHER SPECIFICATION	
Control and monitoring	See Smartpack2 datasheet See T2S datasheet
Power modules	See Flatpack2 48V 3000 HE datasheet See TSI Bravo 48Vdc 230Vac datasheet
Efficiency	>96% (mains mode (AC/AC and AC/DC)), >92% (inverter mode (DC/AC))
Operating temperature	-40 to +45°C (-40 to +113°F), humidity 5 - 95% RH non-condensing
Storage temperature	-40 to +85°C (-40 to +185°F), humidity 0 - 99% RH non-condensing
Dimensions[WxDxH] / Weight	1200 x 600 x 2200mm (47.4 x 23.7 x 78.8") / 250 kg (551 lbs) exc. batteries
Protection class	IP 20
DESIGN STANDARDS	
Electrical safety	EN 60950-1; EN 62040-1 UPS safety
EMC	ETSI EN 300 386 V.1.6.1; FCC CFR 47 Part 15 EN 61000-6-1 /-2/-3/-4; EN 62040-2
Environment	ETSI EN 300 019: 2-1 (Class 1.2), 2-2 (Class 2.3) & 2-3 (Class 3.2) RoHS (2011/65/EU) and WEEE (2002/96/EC) compliant Normal operating conditions as per IEC/EN 62040-3 clause 4.1
¹⁾ Only available with AC Mains 1 present ²⁾ Maximum available output power and current is dependent on AC input voltage; ³⁾ If DC voltage is pulled below 43V the input current may increase above this level ⁴⁾ 40 – 43.5 V _{DC} : reduced performance - no power boost and increased voltage THD on AC output	

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Specifications are subject to change without notice