

Power

Cordex™ 3.3kW System

125V High Voltage Integrated System



Cordex 125-3.3kW system

- 26.4A system capacity
- Cordex 125V – 1.1kW modular rectifiers
- AC input 208 to 240VAC
- DC output 90 to 160VDC
- Front accessible for rack or wall mounting
- Ethernet and SNMP communications
- Designed for industrial and utility applications

The Cordex 3.3kW high voltage integrated power system provides the best in efficiency and reliability meeting the power requirements for a variety of system applications. This system is specifically designed to recharge all types of stationary batteries for large utility, petrochemical and industrial uses.

The Cordex 3.3kW is a compact 7RU integrated system, with up to three Cordex 1.1kW rectifiers in a 19" shelf available for rack or wall mounting. Local and remote setup, adjustment and control is a simple single-step process via the Cordex CXC touch screen system controller or via ethernet on standard Windows Internet Explorer. Battery management and data logging are standard system features.

Cordex 3.3kW 125V High Voltage Integrated System

Integrated System

Electrical

Input voltage:	208 to 277VAC
Phase:	1 or 3
Frequency:	45 to 66Hz
Current:	System 26.4A @ 125VD (max. 33A)
Power Factor:	>0.99 (input current)
Efficiency:	>93% (50 to 100% load)
Output Voltage:	90 to 160VDC
Current:	8.8A per module @ 125VDC, up to 3 modules per shelf
Load Regulation:	Static <+0.5%
Line Regulation:	Static <+0.1%
Transient response:	<+2% for 10 to 100% load step. 10ms recovery time.
Wide band noise:	<10mVrms <80mVp-p
Insulation:	2.5kVAC Input-Earth 3kVAC Input-Output 2kVAC Output-Earth 0.5kVAC Signals-Earth

Mechanical

Charger Enclosure:	Wall or Rack Mount
Dimensions	
inches:	12.2H x 17.1W x 11.9D
mm:	309H x 434W x 302D
Weight:	12.59kg (27.76lb)*
Enclosure:	NEMA 1 (charcoal finish)

Features

User Interface

GUI:	Use Internet Explorer browser to access embedded GUI through Ethernet port or RS-232 craft port
Display:	Full graphic LCD, 160 x 160 pixels, with backlight and contrast adjustment
Controls:	LCD touch screen with virtual alpha numeric and numeric keyboards
LED indicators:	System OK—Green Minor alarm—Yellow Major alarm—Red
Audio:	Built in speaker for alarms and popup messages
Language:	Multi language support including Chinese characters

Communication Ports

RS-232 (DB-9):	Craft port on front panel for local PC connection
CAN OUT (RJ-12 offset):	CAN communication BUSS to optional smart peripheral modules
RS-485 (RJ-12 offset):	For future service options
Ethernet (RJ-45):	10/100 Base T with half/full duplex

Alarms

Output:	6 potential free form C contacts
Input:	4 digital inputs
GFD:	Ground fault detect
SNMP:	SNMP agent provides real time system status to the network management software

*Rectifier module not included system weight

Data Logging

Daily statistics:	Minimum, maximum and average on input channels, with date and time stamp Battery current, rectifier current, and AC mains voltage for last 90 days
Event log:	On all events such as alarms, power on, any change of state of the digital inputs, or other miscellaneous events
Battery log:	Battery health history on last 20 discharges, time of discharge, and battery capacity

Control Functions:

Automatic, scheduled (periodic) or manual equalize
Automatically terminated equalize charge
Battery current terminate equalize
Dynamic charge current control
Battery capacity and runtime prediction
Auto or manual battery test

DC Output Panel

2 x 2 Pole, 32A breakers (10KAIC) with alarm monitoring

AC Input (not a service entrance):

Single phase:	1 x 2-pole 10KAIC (30KAIC Option)
Three phase:	1 x 3-pole delta connection 10KAIC 1 x 3-pole wye connection 10KAIC

Environmental

Temperature Range

Operating:	-40 to 50°C (-40 to 122°F)
Extended:	Rectifier derated to 600W @ 65°C (149°F)
Humidity:	0 to 95%
Cooling:	Natural convection
Heat dissipation:	<900 BTU per hour/system

Standards

Safety:	UL 60950 3rd editions, CSA C22.2 No. 60950-00 3rd edition EN 60950 CE
EMC:	ICES-003 Class A FCC Part 15, Class A, FCC Part 68 EN 55022 Class AA (CISPR 22) EN 61000-4-2 ESD EN 61000-4-3 Radiated Immunity EN 61000-4-4 EFRT/Burst EN 61000-4-6 Conducted Immunity

For more information, please contact:

Alpha Power Systems Pty Ltd
18/30 Heathcote Road
Moorebank NSW 2170
Australia

Phone: +61 2 9602 8331
Fax: +61 2 9602 9180

E-mail: admin@alphapower.com.au
Website: www.alphapower.com.au