# Cordex™ CXCM4

## System Controller

CXCM4

- Modular, hot swappable controller for use with 3.1kW, 3.6kW and 4kW rectifier platforms
- Internet ready and remotely accessible for complete system monitoring and control
- Integrated SNMP functionality for cost effective multiple site monitoring
- Advanced battery monitoring and power save features for OPEX savings and reduced carbon footprint
- Highly configurable platform with user definable alarms and data logging provides maximum flexibility with a common platform

Cordex CXC controllers bring advanced monitoring technology to the Cordex series of rectifiers. The CXCM4 is a modular system controller option for the 4RU 24V-3.1kW, 48V-3.6kW and 48V-4kW rectifier shelf systems.

The CXCM4 controller includes a PDA-style touch screen GUI for simple and convenient local setup. A built-in web server provides alternate setup via local or remote IP access using a standard Windows Internet Explorer browser.

The integrated logging feature allows the capture of data from multiple inputs for AC/DC voltages, load/battery current, and cell voltage/temperature. Common applications of the CXCM4 logging include power system details, thermal performance of outdoor enclosures, battery cell specifics, or mains variations captured by an AC voltage watchdog. The CXCM4 I/O feature set can be easily expanded with the addition of CXC smart peripherals such as battery cell monitoring, shunt multiplexing, and alarm relay expansion.

Cordex CXCM4 modular controllers ensure effortless operation of the Cordex rectifier family. Time consuming, complicated set up and monitoring of DC power systems are now a thing of the past.

# Cordex™ CXCM4 System Controller

**Part Number: 018-574-20**

## Features

### User Interface

GUI: LCD touch screen display for local access
Embedded web based GUI accessed via ethernet or modem using Internet Explorer (IE6 and above)
Display: Full graphic LCD, 160x160 pixels, with backlight and contrast adjustment
Audio: Built-in speaker for audible alarm
Indicators: System OK (green LED)
Minor alarm (yellow LED)
Major alarm (red LED)

### Rectifier features

- Single point adjustment
- Auto load share
- Power save
- Power on delay start

### Battery features

- Temperature compensation
- Manual, auto, and periodic equalize
- Battery current terminate equalize
- Battery over temp equalize shutoff
- Dynamic charge current control
- Battery runtime and capacity indication
- Battery low capacity warning
- Auto or manual battery test mode

### System features

- CAN bus interface to Cordex rectifiers and smart peripheral modules
- Password protection
- Virtual rectifier, battery & shunt addition current
- User configurable alarms
- User configurable signals
- Languages for English, Chinese & 3rd language option
- Downloadable software & firmware upgrades

### Communications

Alarm relays: Potential free Form C contacts
SNMP: SNMP v2.5 via ethernet
Requires SNMP management software (e.g., HP openview, SNMPc)
Email: SMTP via ethernet or modem

### Communication ports

CAN: Interface to Cordex series rectifiers and optional smart peripheral modules
Ethernet: 10/100 Base T with half/full duplex (front)
Serial: RS-232 (front)

### System I/O

Alarm relays: 8
Voltage inputs: 1 +1 internal
BiV inputs: 2
Temp inputs: 2
Current inputs: 4
Digital inputs: 4

### Log files

Daily statistics: Min., max. and average on analog input channels with date and time stamp
Battery current, rectifier current and AC mains voltage for last 90 days
Event log: All events such as alarms, power on, change of state on digital inputs or other events
Battery log: Battery health history on last 20 discharges with time of discharge and battery capacity
Data logging: Up to 16 user configurable logs of all system signals including smart peripherals

## Electrical

Input voltage: 17 to 65Vdc
Current: <100mA @ 48Vdc
<200mA @ 24Vdc

## Mechanical

Dimensions:
mm: 177H x 87W x 257D
in: 7.0H x 3.4W x 10.1D
Mounting: Modular controller for 3.1kW, 3.6kW and 4kW shelves
Weight: 1.8kg (3.9lb)

## Environmental

Temperature: -40 to 65°C (-40 to 149°F)
Humidity: 0 to 95% RH non-condensing

## Related Components

036-202-20: External I/O terminal block connector kit

## Agency Compliance

Safety: UL/CSA C22.2 No 60950-1
IEC/EN 60950-1
CE marked
EMC: ETSI 300 386
Emissions: CFR47 (FCC) part 15 Class B
ICES-03 Class B
EN55022 (CISPR 22) Class B
C-Tick (Australia)
Immunity: EN 61000-4-2,-3,-4,-5,-6

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