

Cordex PSU

Web Enabled, DIN Rail/Wall Mount
Power Supply 24V/400W or 48V/650W



Your Power Solutions Partner

- Clean and reliable DC power supply for critical loads available in two options: 24V/400W or 48V/650W
- Internet ready and remotely accessible for complete and cost effective system and site monitoring
- Advanced battery charging, monitoring and testing to ensure sufficient reserve power availability and prolonged battery life
- Configurable platform with I/O's for site monitoring, user-definable alarms, data logging and control
- Extended temperature range for installation in harsh outdoor environments
- Wide AC input operating range for world wide installation requirements



Alpha's Cordex PSU is an integrated, fully-featured DC power system in a compact form factor. It is designed to provide power to critical loads while enabling remote site monitoring and delivering critical information on demand. The PSU supplies reliable and low output ripple current along with short circuit, over voltage, over temperature and over load protection. It also features advanced battery charging, monitoring and testing functionality. Two temperature, two digital and one analog inputs can be used for monitoring system alarms such as intrusion detection or equipment malfunction.

The integrated CXCI+ controller offers comprehensive local and remote control and monitoring, including a web server, providing easy set up using a standard Windows Internet Explorer browser. SMTP features 'enable alarm' condition settings and multiple automatic notification options by e-mail to a computer, server or smartphone. Sites without internet access can use the integrated CXCI+ controller as an advanced standalone data logging system, allowing the capture of data from multiple inputs such as AC/DC voltages, load/battery current, and cell voltage/temperature. The CXCI+ captures and retains 90 days' statistical data and 500 alarm events, ready for download to a laptop for site history file and analysis of system performance, power system details, thermal performance of outdoor enclosures and failure conditions.

POWER



Cordex Power Supply Unit, Web Enabled, DIN Rail/Wall Mount Power Supply

24V-400W model P/N: 0100011-002, 48V-650W model P/N: 0100012-002

ELECTRICAL

	> 48V/650W	> 24V/400W
Input voltage:		
Operating:	176 to 320Vac	90 to 320Vac
Extended:	90 to 176Vac (de-rated power)	
Input frequency:	45 to 70Hz	45 to 70Hz
Current:	5.0A max	4.9A max
Power:	650W	400W
Power factor:	>0.99%	>0.99%
THD:	<5%	<5%
Efficiency:	>91%	>88%
Output voltage:	42 to 58Vdc	20 to 29Vdc
Output current:	13.5A max	14A max
Load regulation:	Static <±0.5% Dynamic <±2% for 50 to 100% load step 2ms recovery time	Static <±0.5% Dynamic <±5% for 50 to 100% load step 2ms recovery time
Line regulation:	Static <±0.1% Dynamic ±1% for any change within rated	Static <±0.1% Dynamic ±1% for any change within rated
Noise:		
Voice band:	<32dBnC	<32dBnC
Wide band:	<10mV RMS (to 10MHz) <100mV pk to pk (to 100MHz)	<10mV RMS (to 10MHz) <100mV pk to pk (to 100MHz)
Psophometric:	<1mV RMS	<1mV RMS

MECHANICAL

Dimensions:

 mm:..... 117H x 281W x 101D

 inches: 4.6H x 11.1W x 3.98D

Weight:..... 3kg (6.6lbs)

Mounting: Panel
DIN rail (standard TS-35/7.5 or 15 Mounting Rail)

Connections:

 AC, Load & Battery:.....Screw terminal 4mm² (#12AWG)

 Alarms & I/O's:Screw terminals 2.5mm² to (#14AWG)

ENVIRONMENTAL

Temperature:

 Operation:-40 to 50°C (-40 to 122°F)

 Extended:-40 to 70°C (-40 to 158°F), derated power

 Storage:-40 to 85°C (-40 to 185°F)

Humidity:..... 0 to 95% RH non-condensing

Altitude:-500 to 3000m (-1640 to 9840ft)

Heat Dissipation:<110 BTU per hour

PERFORMANCE/FEATURES

User Interface:

 GUI:.....Embedded web based GUI accessed
via Ethernet using internet browser

 LED Indicators:.....AC mains OK — green
Minor alarm — Yellow
Major alarm — Red

System Features:.....User configurable alarms
User configurable signals
Downloadable software & firmware upgrades
Lithium battery backup for real time clock

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

Battery Features:.....Temperature compensation
Manual, auto & periodic equalize
Dynamic charge current control
Battery runtime & capacity indication
Battery low capacity warning
Auto or manual battery test mode

Adjustments:.....Float and equalize voltage
Battery test voltage
High and low voltage alarms
High voltage shutdown
Current limit
Start delay time
Slope %

Protection:.....Current limit/short circuit
Input/output fuses
Output high voltage shutdown
Output power limiting
Thermal foldback/shutdown
Input transient
AC low line foldback/shutdown
AC high voltage shutdown

Distribution:.....10A Battery Shunt
20A Low Voltage Disconnect LVBD
(may be disabled with jumpers)

Cooling:Natural Convection

Communication Ports:

 CAN:Smart Peripherals

 Ethernet: 10/100 Base-T for TCIP/SNMP/Email features

System I/O:

 Alarm relays:3

 Temperature inputs:2

 Digital inputs:2

 Voltage input: 1

AGENCY COMPLIANCE

Safety:.....CSA C22.2 No 60950-1-03
CE Marked

EMC:ETSI 300 386-2

Emissions:CFR47 (FCC) Part 15 Class A
EN 61000-3-2, 3-3

Immunity:.....EN 61000-4-2, 4-3, 4-4, 4-5, 4-6, 4-11
ANSI/IEEE C62.41 CatB3

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