

Power

ACE054ST.K48N

Low Profile 4 x 500W Power System



ACE054ST.K48N low profile energy system

- › Power shelf for battery back-up
- › Up to 2000W output power
- › 1U high, low profile shelf
- › Battery backup connections and management
- › Basic site monitoring functions
- › Full open interface, ETSI ES 202 336 compliant
- › Ethernet and USB interface

This power shelf from Alpha Technologies is the perfect answer to all power requirements in the 500W to 2000W range. The shelf encompasses locations for four hot-pluggable rectifiers and can be equipped with an embedded monitoring unit offering all essential functions. Various 1U high distributions can be fitted anywhere in the cabinet to accommodate multiple loads.

The units are the perfect solution to both indoor and outdoor applications and offer a wide range of features to improve control of the system. Beyond the traditional voltage programming, AC and DC fault control, the unit is equipped with a smart derating of the power in regard to internal temperature.

The MCU (Monitoring and Control Unit) supports all the necessary telecom energy monitoring and control functions at the lowest initial investment. It can be upgraded at any time of the life cycle by the features-rich Comp@s card supporting XML, SNMP, FTP and web based services, enabling a virtually infinite opportunity to put sites and networks under perfect control.

Delivered with a temperature sensor, the system supports voltage compensation in regard to the battery temperature, protection against deep discharge, battery charge current limitation and regular capacity testing. The shelf also offers a protection against reverse polarity connection.

The rectifiers do not require any special procedure or tools to be installed in the rack. One LED on the front plate of each rectifier, combined with four LEDs on the monitoring unit, allows rapid detection of operation and faults and makes the system maintenance very simple.

ACE054ST.K48N 48V Low Profile Energy System

Part number:

ACE054ST.K48N: Power system with four 500W rectifiers slots, including monitoring and control unit and temperature sensor

Electrical

Input Voltage:90 to 265VAC

Input Frequency:47 to 63Hz

Input Current
(per module):3.4A @ 180Vac
6.2A @ 100Vac

Efficiency:.....85% typical

Power output*:
(per module):500W
(per shelf):2000W
* Constant output power

Current output
(per module):9.3 @ -54Vdc

Mechanical

Dimensions:
mm:44H (1U) x 440W x 285D
inches:.....1.75H x 17.3W x 11.2D

Mounting:.....19" or ETSI

Weight:
Shelf (empty):2.88kg (6.39lb)
Rectifier:1.350kg (2.97lb)

Connections

Load:M5 Stud

Battery:.....M5 Stud

AC Input:Spring cage terminal block (4 x 2 poles)

Alarms (rear):Female 26-poles Pressfit connector

Environmental

Temperature:
Standard:.....-25 to 55°C (-13 to 131°F)
Extended*:.....-40 to 70°C (-40 to 158°F)
*degraded mode
Storage-40 to 85°C (-40 to 185°F)

Humidity:
Operating20 to 80% RH non-condensing
Storage:10 to 95% RH non-condensing

Elevation:.....Up to 3000m (9842ft)

Cooling:.....Fan cooled (front to rear)

Related Components

Rectifiers:
CAR0548TN:CAR 500W 48Vdc rectifier

Supervisory:
MCU0548M4:Controller with basic site monitoring functions
Comp@s:Advanced embedded monitoring software

Accessories:
9411 040 55001:Blank plate for rectifier slot
5304 500 01141:1.5m temperature probe (bare wire)
5304 500 00791:.....3m temperature probe (bare wire)
5304 500 01031:.....Humidity sensor (bare wire)
4004 003 87451:Mating connector for temperature probe and humidity sensor

Standards

Safety:CE marked
EN60950

Environment:RoHS compliant
IEC 68-2-27

EMC:see specifications sheet



Rear view: ACE054ST.K48N low profile energy system