

# Power

## ACE094ST.L48N ACE104ST.L48N

Low Profile Power System



ACE094ST.L48N low profile energy system

- › Power shelf for battery back-up
- › Up to 4000W output power
- › Fits in a 300mm deep cabinet
- › Battery backup connections and management
- › Very easy integration in TNM systems
- › Full open interface, ETSI ES 202 336 compliant
- › Ethernet and USB interface

**With more than 3000W redundant power on a 19" 1U shelf that fits in a 300mm (11.8") deep cabinet, this system is the perfect answer to the growing number of applications where space is a constraint.** This performance is the result of years of experience shared by the engineering teams with their colleagues from field service and operations to design superior power density without any compromise on reliability.

This power rack of Alpha Technologies is the perfect answer to all power requirements in the 850W to 3400W range. The system encompasses locations for four hot-pluggable rectifiers. The system can be equipped with an embedded monitoring unit offering all essential functions and can be upgraded at any moment with battery management functions and even a communication card for remote control through TCP/IP. The communication offers unrivalled functions supporting XML, SNMP, webserver, FTP, all in compliance with international standards.

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 features voltage compensation in regard to the battery temperature, protection against deep discharge, battery charge current limitation and regular capacity testing. The system features protection against reverse polarity connection and a user-controlled battery charge current limitation.

## ACE094ST.L48N 48V Low Profile Energy System

Part number:

ACE094ST.L48N: Power system with 850W rectifiers

ACE104ST.L48N: Power system with 1000W rectifiers

### Electrical

Input Voltage: .....90 to 265VAC

Input Frequency: .....47 to 63Hz

Input Current  
(per module): .....5.8A/6.8A @ 180Vac (850W/1000W)  
7.6A @ 90Vac

Efficiency:.....90% typical

Power output\*:  
(per module): .....850W/1000W (CAR0948TN/CAR1048TN)  
500W (power derating)  
(maximum): .....3400W/4000W (CAR0948TN/CAR1048TN)  
\* Constant output power

Current output  
(per module): .....18.5A @ -54Vdc (CAR1048TN)  
15.7A @ -54Vdc (CAR0948TN)

### Mechanical

Dimensions:  
mm: .....44H (1U) x 440W x 259D  
inches:.....1.75H x 17.3W x 10.2D

Mounting:.....19" or ETSI

Weight:  
Shelf:.....2.5kg (5.5lb)  
Rectifier: .....1.16kg (2.56lb)

### Connections

Load: .....M5 Stud

Battery:.....M5 Stud

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

Alarms (rear): .....Female 3 x 8 poles connectors

### Environmental

Temperature:  
Standard:.....-20 to 55°C (-4 to 131°F)  
Extended\*:.....-40 to 70°C (-40 to 158°F)  
\* de-rated output power  
Storage .....-40 to 85°C (-40 to 185°F)

Humidity:  
Operating .....20 to 80% RH non-condensing  
Storage: .....10 to 95% RH non-condensing

Elevation:.....Up to 2500m (8200ft)

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

### Related Components

Rectifiers:  
CAR0948TN: .....CAR 850W 48Vdc rectifier  
CAR1048TN:.....CAR 1000W 48Vdc rectifier

Supervisory:  
MCU0948M4: .....1U high controller with LCD display  
Comp@s: .....Advanced embedded monitoring software

Accessories:  
9411 040 55001: .....Blank plate for rectifier slot  
5304 500 00531: .....Rear cover  
5304 500 01131: .....Mating connector kit for alarms  
5304 500 01141: .....Temperature probe

### Standards

Safety: .....CE marked  
EN60950

Environment:.....RoHS compliant  
IEC 68-2-27

EMC: .....see specifications sheet



Rear view: ACE094ST.L48N low profile energy system