

ACE102

1U - 19" power racks with advanced
monitoring & distribution



DISCOVER →

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Modular, Connected and Reliable

The **ACE102** delivers **2000 W** of output power in a **19" 1U shelf** designed for installation in 300 mm (11.8") deep cabinets, making it an ideal solution for applications where **space is limited**. This high power density is the result of extensive engineering experience combined with operational feedback to ensure maximum reliability without compromise.

Designed for maximum installation efficiency, the system features **full front-access distribution** for fast, hassle-free deployment. The ACE102 delivers four protected DC outputs, with optional protected battery input configurations, providing flexibility to meet a wide range of applications. With no special tools or complex procedures required, installation is effortless. All load connections are conveniently accessible from the front panel, eliminating rear-side wiring and reducing installation time.

An integrated **MCU (Monitoring and Control Unit)** delivers essential telecom energy monitoring and control functions at minimal initial cost. With **COMPAS**, our embedded monitoring software, users gain secure access to system parameters, alarms, and event logs - remotely. Indeed, COMPAS supports XML, SNMP, FTP and web based services enabling a virtually infinite opportunity to put sites and networks under perfect control. Furthermore, Python scripting is supported for on-site automation, such as alarm logic, remote test routines, or access control functions.

Specifications

Electrical

Input	
Input Standard Voltage AC	100 to 240Vac
Input Frequency	50/60 Hz
Input Standard Voltage DC	100 to 340Vdc
Input Voltage Maximum	300Vac / 410Vdc
Input Current	Refer to Converter Module (CDCWI1048 or ECOR1048)
Efficiency	Refer to Converter Module (CDCWI1048 or ECOR1048)
Output DC	
Output Voltage	-40.5 to -58 Vdc
Output Power (per module)	Refer to Converter Module (CDCWI1048 or ECOR1048)
Output Power Maximum	2000W
Output Current	2x10A + 2x30A max
Load breaker	10 - 10 - 16 or 30 - 16 or 30
Output Battery	30 A
Battery	
Max Battery Output (LVD)	80A

Standards

Safety	CE marked EN 62368-1 IEC 62368-1 (formerly IEC 60950-1) CEBEC and c-SGS-us markings
Environment	RoHS compliant
EMC	EN 61000-6-1 ETSI EN300386 EN 61000-6-3

Environmental

Standard Temperature	-20 to 55°C (-4 to 131°F)
Extended (derated output power)	-40 to 70°C (-40 to 158°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Humidity Operating	20 to 80% RH non-condensing
Humidity Storage	10 to 95% RH non-condensing
Elevation	Up to 3000m
Cooling	Forced air cooling (Front to rear) Min free space before and behind the sub-rack = 15mm

Features

Protection	<ul style="list-style-type: none"> Thermal shutdown Hot swap External battery breaker LVD opening Threshold at 42V
Indicators	<ul style="list-style-type: none"> LED off : no power available Green LED : no failure Orange LED : Stand by (remote off) Red LED : Low DC voltage (<37Vdc) Blinking red LED : AC failure, thermal failure or short circuit
With our Monitoring Unit	<ul style="list-style-type: none"> Specific configuration (alarm, function, ...) Alarming on specific signals, events, alarms... Real-time data visualization Customization through Python scripting Remote control and access

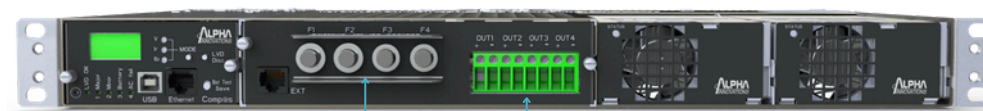


Part Number

Family	9400 009 00000
Specific Configuration	9400 009 001xx

Mechanical dimensions

Front view

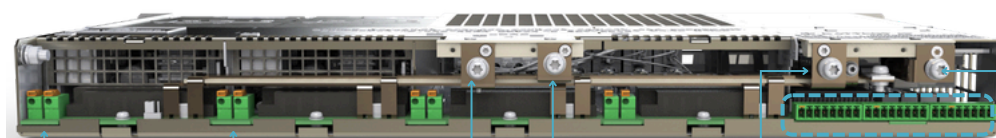


Load Breaker [A]
(10 - 10 - 30 - 30)

Output Connector
BAT - OUT1 - OUT2 -
OUT3 - OUT4

Dimensions (mm)		44 H (1U) x 440 W x 259 D
Dimensions (inches)		1.75 H x 17.3 W x 10.2 D
Mounting		19" or ETSI
Weight (kg)	Shelf	2.5 (5.5 lb)
	Converter Module	1.16 (2.56 lb)
Connections	Load	M5 Stud
	Battery	M5 Stud
	Output (front)	Terminal block (5 x 2 poles)
	Alarms (rear)	Female 3 x 8 poles connectors

Rear view



Main Bus IN (N-L)
2X

Rear Load
Connection +

Rear Load
Connection -

Battery
Connection +

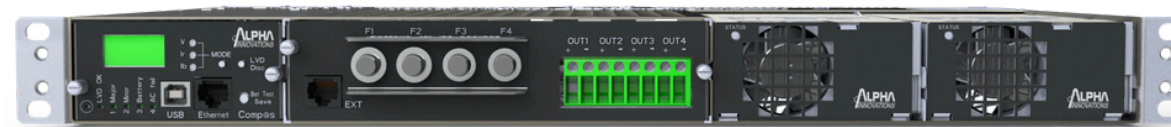
Battery
Connection -

80A max
DC
breaker

Connectors details

X125.1	-48V sense	X126.1	DIG IN 3	X127.1	DIG OUT3 COM
X125.2	OV sense	X126.2	DIG IN 4	X127.2	DIG OUT3 NO
X125.3	OV signal	X126.3	DIG OUT 1 COM	X127.3	DIG OUT3 NC
X125.4	TH sensor	X126.4	DIG OUT1 NO	X127.4	DIG OUT4 COM
X125.5	DIG IN 1	X126.5	DIG OUT1 NC	X127.5	DIG OUT4 NO
X125.6	DIG IN 2	X126.6	DIG OUT2 COM	X127.6	DIG OUT4 NC
X125.7	CAN H	X126.7	DIG OUT2 NO	X127.7	TH sensor 2
X125.8	CAN L	X126.8	DIG OUT2 NC	X127.8	Sharing

Product overview



COMPAS

Slot block related to our embedded software.

Distribution

Slot block for converters.



Accessories :
Rear Cover

MCU Oled

- Screen display
- LED indicators
- LVD function for battery
- USB Connector for device extension
- COMPAS integration

- Output Connector
BAT - OUT1 - OUT2 - OUT3 & OUT4
- Output Breaker
F1 (10A) - F2 (10A) - F3 (30A) - F4 (30A)
- Battery Breaker 30A

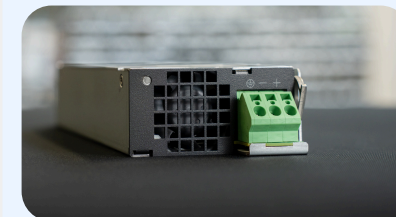
ECOR1048

- **AC in** : 90 to 265 Vac
- **DC in** : 85 to 408 Vdc
- **DC out** : 40.5 to 58 Vdc
- **Efficiency** : 96 %
- **Power** : 1000 W



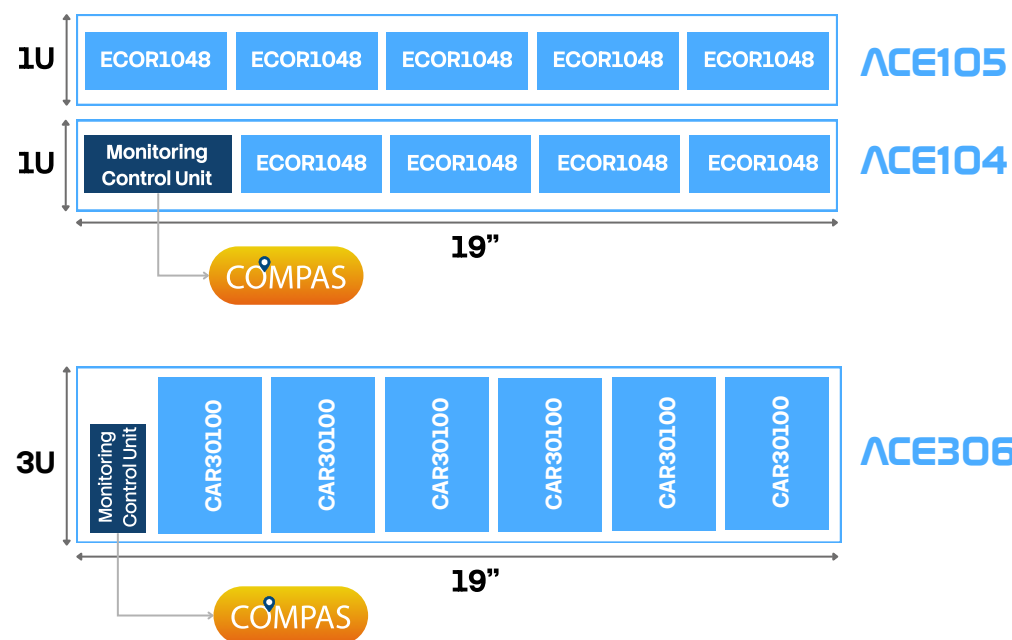
CDCWI1048

- **DC in** : 20 to 72 Vdc
- **DC out** : 40.5 to 58 Vdc
- **Efficiency** : 90 %
- **Power** : 1000 W



Related items

Modular & Configurable Power Racks



ACE Shelves Series

The **ACE Series** is a compact line of 19" power racks from Alpha Innovations, with full front access, hot-swappable rectifiers, advanced monitoring, and flexible battery management, ideal for space-constrained, high-reliability applications.

More info ?

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