

Let's talk!

AC-DC Converter ACDC500-230-67-K1

Universal Power Supply for Telecom Applications

General

Electrical safety	EN 62368
Protection class	1
Isolation group	pollution degree 2
Inflammability	according to UL94V0

Electrical data – AC input

Nominal voltage	$U_N = 230V_{AC}$
Voltage range	197 – 265V _{AC}
Frequency range	45 – 66Hz, sine wave

Electrical data – DC output

Nominal voltage	-67V _{DC} , positive pole connected to housing/protective earth
Output current I_{NOM}	3,7A per 250W converter module
Output power	up to 500W, depending on expansion stage (single module = 250W), without derating up to 50°C
Overload I_{MAX}	1.2 x I_{NOM}
Efficiency	> 90%
Mains hum at full load	≤ 100mVpp (at 197V _{AC})
Ripple at full load	≤ 200mVpp (20MHz)
AC input regulation	≤ 0.1% (at 197/264V _{AC})
Load regulation	≤ 1% (10/90% load jump)
Recovery time	≤ 1ms (10/90% load jump)
OVP threshold	75V _{DC}
TC of output voltage	≤ 0.05% / 1°C
Current limit	constant current, permanent short-circuit-proof
Upgrade capability	2 x 250W modules in one subrack (redundant)
Number of outputs	1 x load, 1 x battery (temperature-dependent adjustment of charging voltage optionally), five additional load outputs optionally
Output characteristic	UI characteristic

Environmental conditions

Ambient temperature during operation	-5°C to +50°C, non-condensing
Ambient temp. during storage / transport	-40°C to +85°C (in original packing)
Relative air humidity	0% to 95%
Max. operation altitude	2000 meters

Reliability

Life utility	≥ 8 years with an MTBF ≥ 50 years
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Picture may differ from actual device

EMC

Emission	EN 61000-6-3
Immunity	EN 61000-6-2 (industrial environment)
Burst (EFT)	4kV, 50Ω, directly coupled
Surge	2kV
ESD	15kV air, 8kV conducted

Signalling

Alarm contacts	potential-free relay contacts, 3-pole led out (COM-NC-NO): - cumulative 250W module error - battery error
Battery temperature	connector for PT1000 sensor (optional)
Optical	LED (green) for each 250W module: power good

Mechanical data

Case material	sheet steel, galvanized
Construction	for mounting in 19" racks
Dimensions:	
Subrack	19", 1U, depth 244mm
250W module	130 x 40 x 160mm
Weight:	
Subrack	approx. 4.3kg (fully loaded)
250W module	approx. 1.5kg
Ingress protection:	
Subrack	IP20
Wiring	rear connection
Cooling	integrated heat sink, temperature-regulated fan per module

Electrical connections

AC input	IEC appliance inlet EN 60320
DC output	screw clamps, type Phoenix Front 4-H-7,62
Battery output	screw clamps, type Phoenix Front 4-H-7,62
Signal connector	Phoenix MC1,5/8-G-3,81 (8-pole, 1.5mm ²)

Warranty

24 months

Order code

ACDC500-230-67-K1