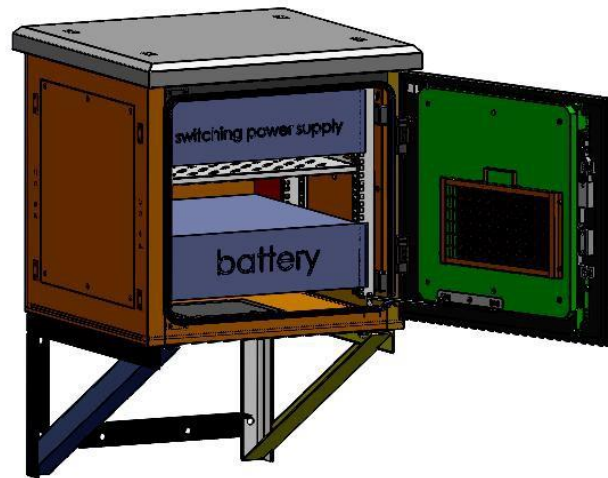


IP55 Cabinet AC-DC Converter

AOC200 Series

- 10U installation space with 19" equipment installation frame
- Double-layer structure
- Good heat preservation performance
- Environmental protection
- Protection against vandalism
- IP55 grade waterproof and dustproof
- Fan-type cooling system
- Easy installation



The AC/DC Converter Mini Outdoor Cabinet is used to host power supply system which converts 220VAC power supply to 48V DC for telecom wireless communications, enterprise and broadband access equipment inside or outside the cabinet.

It can also be equipped with battery charger, to ensure the uninterrupted power supply when the AC power is off.

The cabinet size and solution can be customized based on the field demand of the customer, with many advantages such as easy installation, high protection level against harsh environment conditions.

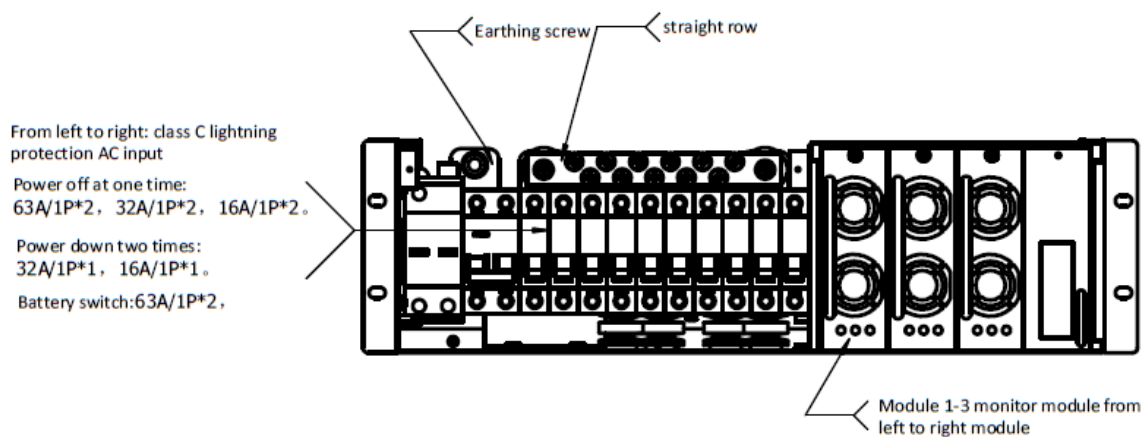
Key Features

- 19" IP55 Cabinet with equipment installation frame
- Outer dimensions: 600 mm × 600 mm × 600mm (W × H × D), 10U installation space
- Double-layer structure, with 1.2mm thickness galvanized steel plate materials, surface coating with special outdoor powder coating, good erosion proof performance
- Good heat preservation performance, with cooling system (fan-type or other on demand), to maintain equipment at its optimum operation temperature
- Protection against environmental influence, the cabinet can protect valuable and sensitive equipment, against rain, snow, wind, sunshine or earthquake, being optimally corrosion resistance
- Protection against vandalism, forcible entry and damage, the cabinet with robust construction and quality materials, also with access control, it's hard to break in or damage.
- High protection level IP55 for waterproof and dustproof
- Color powder coated with RAL7035 or others on demand
- Fan-type cooling system
- Easy installation for wall or pole mounting

AC/DC Power Supply System

The Switching Power System include AC/DC converter, rectifier modules and remote Monitoring module system, with 3U Unit size for the whole system, parameters details refer to the manual of Rectifier module and Monitoring module individually.

- Power system type: convert AC(220VAC) to DC -48V
- With Monitor and remote control module
- LCD display screen, with temperature sensor and alarming system.
- With 2 Rectifier modules
- Converting Maximum Efficiency of Rectifier \geq 95%
- With Lightning protection system
- MTBF \geq 200000h



AOC204 Rectifier Module

These Compact rectifiers are optimized for the demanding power needs of wireless communications, enterprise and broadband access equipment. Requiring only 1u (44mm) of rack height, these compact rectifiers can provide up to 1600 Watts of power and operate up to 75°C. The small size can free up space to reduce system size.

These rectifiers are designed to operate as an integral component in telecommunication power system. They are extremely flexible, and can be applied as a stand-alone module.



Features

- Small Footprint – 1U
- Universal AC Input range
- > 95 % Efficiency
- Operation temperature range from -40°C to +75°C
- Active Load Sharing
- Advanced Internal Monitoring

Electrical Specifications

Model	AOC204-48VDC
Input Voltage	90 to 300Vac full load
Input Voltage (maximum)	300Vac
Input Frequency (minimum)	45 Hz
Input Frequency (maximum)	65 Hz
Input Current (maximum)	30A
Inrush Current (maximum)	≤150% the rated input steady-state peak value (excludes X caps in the EMC input filter)
Power Factor	≥0.99 Typical (@ 220 Vac at full load)
Efficiency	≥95% (@ 220 Vac at full load)
THD	<5% Typical (@ 220 Vac full load)

Output Specifications

Vo Set Point (min/typ/max)	42/53.5/58 (Vdc)
Io Output	30A @53.5Vdc 33.4A @48Vdc
Vo Regulation (min/max)	-1/1 (%) (Total regulation line, load, aging & temperature)
Output Power	1600W
Current Limit (max)	30A

Output Noise (maximum)	<200 mV (peak to peak, bandwidth 20MHz)
Dynamic Response (maximum)	5%
Turn On Delay (maximum)	8 sec
Load Sharing (min/max)	-5/5 (%)

Protection Characteristics

Parameter	Min	Typ	Max	Unit	Notes
Over Temperature Protection			75	°C	
Input Overvoltage Protection		300		Vac	
Input Overvoltage Shut Off		310		Vac	Hiccup mode
Input Undervoltage Protection		80		Vac	
Output Overvoltage Protection		59		Vdc	
Short Circuit Protection					No damage within long time

Environmental Characteristics

Parameter	Min	Typ	Max	Unit	Notes
Storage Temperature	-40		85	°C	
Operating Temperature (internal cooling)	-40		75	°C	-5 to +45 degree C with full performance, derating from 45 °C to 75 °C, 2%/°C
Humidity	5		95	%	Relative Humidity (Non-condensing)
Altitude	-100		2000	m	
MTBF	10 ⁵			hours	
Insulation Resistance	20			MΩ	AC-Enclosure(500VDC)
	20			MΩ	AC-DC(500VDC)
	20			MΩ	DC-enclosure(500VDC)
Dielectric Strength			2121	Vdc	AC-Enclosure
			4242		AC-DC
			707		DC-enclosure
Leakage current			3.5	mA	

Input Derating Characteristics

Input Voltage	90 VAC	176 VAC	300VAC
Output Power	720W	1600W	1600W

Temperature Derating Characteristics

Temperature	-40C	45C	55C	75C
Output Power	1600W	1600W	1344W	800W

Note: Rectifier will shut down above 75C

Physical Specifications

Parameter	Min	Typ	Max	Unit	Notes
Depth		231.3		mm	
Width		107.6		mm	
Height		41.5		mm	Includes Faceplate
Weight		1		kg	

AC204 EMS Module

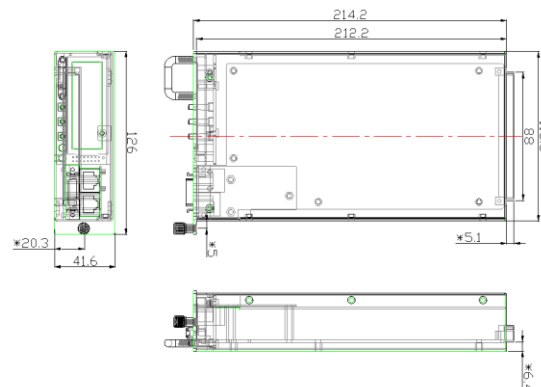
Technical performance

AOC204 EMS MODULE is equipped with powerful detecting and controlling functions, which enables it to do real time detect to the power supply and control the operation status of rectifier module according to the detected data, for the purpose of meeting maintenance and management requirements of the battery groups and ensure reliable operating of the whole power system. It can receive queries, settings and control from the host through RS485 or TCP/IP, SNMP and report detected status and mechanical data to the host for the convenience of centralized management.

Main features

- Multiplex system, environment analog and digital inspection
- Equipped with RS485 and TCP/IP, SNMP Port through which the host can conduct query, setup and remote message/sense/control for the convenience of centralized management
- LCD and keyboard enabling the human-computer interaction
- Auto management of battery charge/discharge prolongs the battery service duration
- Sextuple dry contact output and the output can be flexibly set.
- Serial number and version No. of each rectifier and monitor are accessible.

Mechanical drawing



Dimensions 213.4 mm × 126 mm × 41.6 mm
Weight ≤1 kg

Ordering Information

Item

Equipment

AOC-204-2R-AC-DC-WA

Description (Detailed function of the item/feature in the system)

ACT Outdoor AC-DC Converter AOC200 Series Wall Mount
 1, Cabinet size: 600*600*600 (W*D*H)
 2, Material: 1.2mm thick high-quality galvanized plate
 3, Structure: double layer structure
 4, Configuration: cabinet*1, single door*1 fan*2, lamp *1, access control, grounding copper bar *1, Wall hanging kits *1, Laminates *1, annex *1, switching power supply*1
 5, Space 10U: 3U for switch power, 3U for battery , 3U for spares
 6, Surface spraying color: Beige(RAL7035) or according to customer
 7, Packing: Carton + Pallet
 8, Cabinet protection level: IP55
 9, Including monitoring, including 2 95% rectifier modules

Optional Equipment

AOC-204-2R-AC-DC-PO

ACT Outdoor AC-DC Converter AOC200 Series Pole Mount
 1, Cabinet size: 600*600*600 (W*D*H)
 2, Material: 1.2mm thick high-quality galvanized plate
 3, Structure: double layer structure
 4, Configuration: cabinet*1, single door*1 fan*2, lamp *1, access control, grounding copper bar *1, holding pole*1, Laminates *1, annex *1, switching power supply*1
 5, Space 10U: 3U for switch power, 3U for battery , 3U for spares
 6, Surface spraying color: Beige(RAL7035) or according to customer
 7, Packing: Carton + Pallet
 8, Cabinet protection level: IP55
 9, Including monitoring, including 2 95% rectifier modules

System Components / Accessories

No.	Name	Qty	Description
1	Outdoor Cabinet Body Structure and Materials Color	1	600(W)x600(H)x600(D) mm, With total 10U Space Double layer structure, with 1.2mm thick galvanized steel plate RAL7035 powder coating
2	Single door with lock	1	Open left
3	Fan	2	
4	Lamp	1	
5	Access control	1	
6	Copper grounding bar	1	
7	Installation Kits	1	For Wall or Pole mounting
8	Laminate	1	
9	Switching Power system	1	AC/DC Converter, 1 Monitoring Module, and 2 Rectifier Modules
10	Packing	1	Carton + Pallet or other

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