AC-8KW-R

8KW AC220V Resistive Load Bank (Rack Load)

Our AC-8KW-R rack load bank is designed for standard 19-inch cabinets in IDC server rooms. It operates on AC 220V systems as a simulated load below 8KW, testing precision air conditioning, monitoring and power supply systems under load. Six C14 sockets provide parallel power input, each rated at 10A. Four socket circuits are independent.

The rack load bank uses alloy resistor elements for stable power and low temperature drift. It provides stable loading to meet test requirements and is widely used domestically and internationally for loading and heat generation.

All internal wiring uses high-temperature silicone cables rated above 120°C and resistant to burning at high temperatures. The temperature protection threshold is set to 70°C.

An internal AC contactor is interlocked with the fan switch. Loading is disabled until the fan is switched on. Excessive temperature disconnects load power and activates audible and visual alarms.

Features

- 500W/500W/1KW/2KW/2KW/2KW load stages
- Alloy resistors; stable power, low temperature drift
- Fan interlock enables loading only after fan start
- 70°C over-temperature unloading and audible/visual alarms
- Internal silicone cables rated above 120°C
- 19-inch standard cabinet; 4U rack installation



Main Functions

- Simulate loads to test the load capacity and wiring reliability of the entire electrical chain, from substation and distribution equipment and diesel generators to UPS systems, row distribution cabinets and PDUs.
- Simulate loads to verify that precision air conditioning meets operating requirements as aisle or server-room temperatures rise.
- Simulate loads to test UPS battery transfer capability under load and power supply duration.
- Simulate loads to verify that diesel generators can start normally and supply power under load.
- Other simulated load test applications.

Dimensions

W	H	D
430	177	550

Power Cables / Connector Options

Options for different countries and industry applications

01 China-standard Cable

3×1.5 mm²



Gauge	3×1.5 mm²
Length	Custom; standard 1.5 m
Plug	China 3-pin
Region	Mainland China
Equipment	General and rack equipment

02 C13-C14 Cable

3×1.5 mm²



Gauge	3×1.5 mm²
Length	Custom; standard 1.5 m
Plug	C14 male
Socket	C13 female
Region	Europe / universal
Equipment	IT, servers, monitors

03 C13-C20 Cable

3×1.5 mm²



Gauge	3×1.5 mm²
Length	Custom; standard 1.5 m
Plug	C20 male
Socket	C13 female
Region	Universal
Equipment	High-power and rack equipment

04 C19-C20 Cable

3×1.5 mm²



Gauge	3×1.5 mm²
Length	Custom; standard 1.5 m
Plug	C20 male
Socket	C19 female
Region	Universal
Equipment	Servers, industrial equipment, high-power applications

05 63A Industrial Connector

Custom configuration



Current	63 A
Voltage	380-415 V; custom
Length	Custom
Use	Three-phase high-power equipment, industrial testing, data centers

06 1-phase 32A Connector

Custom configuration



Current	32 A
Voltage	200-250 V; custom
Length	Custom
Use	Single-phase high-power equipment, industrial testing, rack equipment

Technical Parameters

Item	Specification
Rated Voltage	AC220V
Rated Power	8KW
Frequency	50HZ/60HZ
Power Stages	500W/500W/1KW/2KW/2KW/2KW
Power Factor	1
Load Resistance Accuracy	≤5%
Control Power	AC220V
Load Connection	4 C14 sockets at the rear; each circuit is independent.
Power Cables	As specified in the contract.
Operating Ambient Temperature	Below 70°C (set protection temperature)
Load Protection	Short-circuit and over-temperature protection. Above the set 70°C threshold, the unit alarms and unloads.
Protection & Interlock	Loading is disabled until the fan is switched on. Excessive temperature activates audible/visual alarms and disconnects the load. Operation may resume only after manual confirmation and a power-off reset.
Cooling	Forced air cooling (front intake, rear exhaust)
Fan Model	DC24V, 15050
Airflow	1000 m³/h
Enclosure Dimensions	W×H×D=430×177×550 mm. Welded steel construction with electrostatic powder coating; 1.2 mm steel enclosure and 1.0 mm steel lid.
Resistor Material	Alloy resistor
Installation Location	Indoor