4U5KW-AC220V-R

Rack-Mounted AC Load Bank

The 4U5KW-AC220V-R rack-mounted load bank is a high-power-density test load device developed for IDC data centers and standard 19-inch rack environments.

Product Overview

The 4U5KW-AC220V-R rack-mounted load bank fits standard 19-inch racks and AC220V systems. It provides a simulated load below 5KW for loaded testing of precision air conditioning, monitoring and power systems. Each rear C14 interface is rated at 10A; power cords are selected to match the site PDU.

Nickel-chromium alloy load resistors provide low temperature drift, a high melting point and corrosion resistance for stable load power.

Internal high-temperature silicone wiring is rated above 120℃. Overtemperature protection is set to 70℃. The fan and load are interlocked: loading is disabled until the fan runs. Overtemperature disconnects the load and triggers an audible and visual alarm.



Main Functions

- Check load capacity and connection reliability across distribution equipment, diesel generators, UPS units, rack cabinets and PDUs.
- Check precision air-conditioning operation as aisle or room temperature rises.
- Test UPS loaded transfer and supply duration.
- Test loaded startup and power delivery of diesel generators.
- Support other simulated-load tests.

Dimensions

Width W mm	Height H mm	Depth D mm
485	177	500

Load Operation

- Manual loading from the control panel; rated stages: 500W, 1KW, 1.5KW and 2KW.
- Start the fan before applying load. Loading is interlocked with the fan.
- After unloading, keep the fan running for approximately 3 minutes to cool the resistors.
- Monitor the unit on site during testing.

Power Cord / Connector Options

Various specifications for use in different countries and industries.

01 Chinese-standard cable

3*1.5 mm²



Wire size	3×1.5 mm²
Length	Customizable (standard 1.5 m)
Plug type	Chinese-standard 3-pin
Region	Mainland China
Devices	General equipment; rack equipment

02 C13 C14 European cable

3*1.5 mm²



Wire size	3×1.5 mm²
Length	Customizable (standard 1.5 m)
Plug type	C14 male
Socket type	C13 female
Region	European / universal
Devices	IT equipment, servers, monitors, etc.

03 C13 C20 cable

3*1.5 mm²



Wire size	3×1.5 mm²
Length	Customizable (standard 1.5 m)
Plug type	C20 male
Socket type	C13 female
Region	Universal
Devices	High-power equipment; rack equipment

04 C19 C20 cable

3*1.5 mm²



Wire size	3×1.5 mm²
Length	Customizable (standard 1.5 m)
Plug type	C20 male
Socket type	C19 female
Region	Universal
Devices	Servers; industrial equipment; high-power applications

05 63A industrial connector

(customized on request)



Current	63 A
Voltage	380-415 V (customizable)
Length	Customizable
Use	Three-phase high-power equipment; industrial testing; data centers, etc.

06 Single-phase 32A connector

(customized on request)

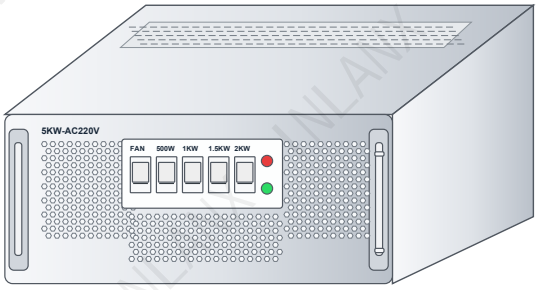


Current	32 A
Voltage	200-250 V (customizable)
Length	Customizable
Use	Single-phase high-power equipment; industrial testing; rack equipment, etc.

Technical Specifications

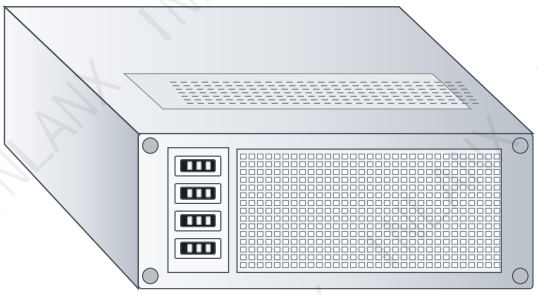
Rated voltage	AC220V
Rated power	5KW
Power stages	500W, 1KW, 1.5KW, 2KW
Weight	15KG ±0.5KG
Load accuracy	≤5%
Load input	Four rear C14 sockets in parallel; 10A each
Fan supply	AC220V
Power cord	Standard; configured for the site PDU
Enclosure size	W×D×H = 485×500×177 mm
Operating ambient	Below 70℃ (protection set point)
Cooling	Forced air, front intake and rear exhaust

Front Panel



Fan/load switches · Alarm · Indicator

Rear Panel



Load input · Fan power