48KW-AC/DC-PTC

Liquid-Cooled AC/DC Load Bank

Our 48KW-AC/DC-PTC rack-mounted load bank is a high-power-density test load developed specifically for IDC data centers and standard 19-inch rack environments.

Product Overview

Supports AC220V at 48KW and DC270V at 48KW. Automatic AC/DC mode recognition simplifies operation.

PTC heating material provides self-limiting temperature behavior. Resistance increases with temperature, moderating the power change.

Collects inlet/outlet water temperature and pressure and supports data export. No electrical data acquisition is provided. Optional programmable control supports RJ45 connection to a liquid-cooling cabinet.



Features & Applications

- Single-phase AC and DC: 1KW steps; three-phase AC: 3KW steps.
- Manual control with inlet/outlet water temperature and pressure monitoring.
- Power, energy storage, charging and liquid-cooling system tests; R&D, production and on-site validation.

Protection Functions

- High outlet-water temperature; dry-run protection with low-flow / no-flow interlock.
- Overvoltage, overcurrent, overload, short-circuit, grounding and coolant-leak protection.

Dimensions

Width W mm	Height H mm	Depth D mm
440	265	800

Standard C13-C14 cords; verify site PDU compatibility.

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

Product	48KW liquid-cooled AC/DC load bank
Model	48KW-AC/DC-PTC
Rated power	48KW (48KW AC / 48KW DC)
Control	Manual control; optional programmable control with RJ45 connection to a liquid-cooling cabinet
AC operation	AC220V, 48KW
DC operation	DC270V, 48KW
Single-phase AC steps	1KW increments
Three-phase AC steps	3KW increments
DC power steps	DC270V; 1KW increments
Automatic detection	Automatic AC/DC mode recognition
Heating material	PTC resistors
Programmable interface	Optional RJ45 connection to a liquid-cooling cabinet
Electrical data acquisition	None
Coolant measurements	Inlet/outlet water temperature and pressure
Data functions	Data export supported
Overall dimensions	W×H×D = 440×265×800 mm

Front Panel



Rear Panel

