INLANX-300KW-DC450V

Programmable DC Load Bank

Rated at DC450V and 300KW for testing DC power, energy storage and distribution equipment.

The INLANX-300KW-DC450V uses resistive load elements with local touchscreen control and RS485 remote communication.

Product Overview

Developed to test DC supplies, energy storage, rectifiers, DC distribution and related electrical systems, the 300kW-DC450V programmable DC load bank uses stable purely resistive elements combined in steps. It serves factory, type and aging tests, site commissioning and research verification.

Local touchscreen and remote control monitor and display voltage, current, power and other parameters in real time. Overtemperature, overcurrent, short-circuit and other protections support extended continuous operation and stable loading in industrial tests.



Functions

1. Stepped loading: Switches or the control system combine steps with a 10kW minimum increment for different DC load tests.
2. Fast switching: 25%, 50%, 75%, 100% or preset power for step loading, dynamic response and loaded transfer tests.
3. Local control: The interface starts/stops, switches steps, sets parameters and shows operating status.
4. Remote communication: RS485 links to a host, PLC or central monitor for parameter reading, status and load control.
5. Monitoring: DC voltage, current, power and internal temperature during operation for test records and analysis.

Protection

1. Overtemperature: An internal sensor checks cabinet temperature continuously; above the set limit, load is removed and an alarm issued.
2. Fan interlock: No loading before the fan supply switch is on; prevents loading without cooling.
3. Abnormal stop: Automatically removes the load during abnormal operation for safety.
4. Emergency stop: An optional button quickly disconnects load output.
5. Short-circuit protection.
6. Overcurrent protection.

Dimensions

Width W mm	Height H mm	Depth D mm
1400	1900	900

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	Cabinet-type programmable resistive DC load bank
Model	INLANX-300KW-DC450V
Rated / operating voltage	DC450V / DC350V–DC600V
Rated power	300KW at DC450V
Load steps (provisional)	10KW, 10KW, 20KW, 20KW, 8 × 30KW
Minimum step	10KW
Fast switching	25%, 50%, 75%, 100% and preset power
Resistor accuracy	±1%
Control	Local touchscreen and RS485 remote control
Measurements	DC voltage, current, power and internal temperature
Control supply	220V; internal supply available
Load terminals	Four groups of 95 mm² cables; allow busbar space
Insulation class	Class F
Cooling	Forced air
Cabinet dimensions	W1400 × H1900 × D900 mm
Weight	450 kg
Environment	−10°C to 40°C; relative humidity ≤95%RH
Protection	Overtemperature, fan interlock, abnormal shutdown, short circuit and overcurrent; optional emergency stop

Controls

- Local touchscreen: start, stop, switch load steps, set parameters and view status.
- RS485: remote measurement, status monitoring and load control.
- Fast loading: 25%, 50%, 75%, 100% or a preset power.

Applications

- DC power system loaded tests; energy storage DC-side performance verification.
- Rectifier and charger output tests; DC cabinet and distribution factory tests.
- Electrical-product aging and continuous operation; research, laboratory and production test platforms.

Product Information

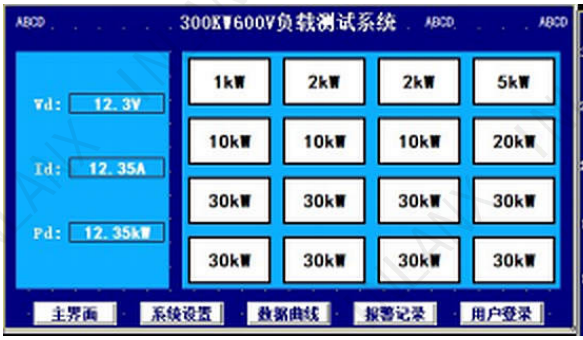
- Product: Programmable DC test load bank.
- Source model: 300kW-DC450V (DC450V to DC600V).
- Type: cabinet-type programmable resistive DC load equipment.
- Installation: indoor floor standing; forced-air cooling.

Operating Environment

- Operating temperature: -10°C to 40°C. Relative humidity: no more than 95% RH.
- Indoor installation with good ventilation and without severe dust or corrosive gases.
- The floor or foundation must be flat, firm and able to bear the equipment weight.

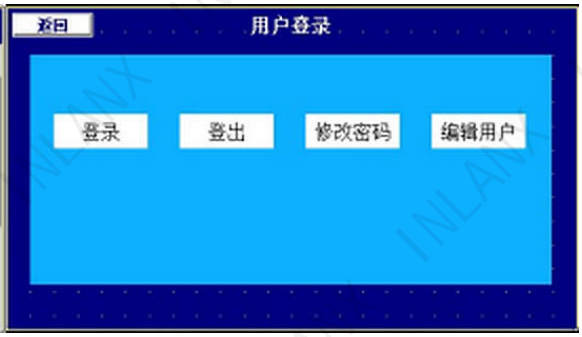
Operation Screens

Screens below are preserved from the source agreement. The first screen retains its original 300KW/600V title; the ratings in this specification govern.









Technical Notes

• Rated 300kW at DC450V. Components are specified for 650V, while resistors are configured for 450V. A seconds-long overvoltage surge is acceptable; prolonged overvoltage may trigger a temperature alarm.

• The touchscreen is mounted approximately 1.5 m above the floor. Internal supply is available. The load terminals require four groups of 95 mm² cables and sufficient reserved copper busbar space.



Quality Assurance and Inspection

• The supplier shall ensure safe and reliable operation of the load equipment and take full responsibility for its design, manufacture, supply, testing, packing, shipment and site commissioning.

• Design, manufacture and acceptance tests shall comply with applicable specifications and standards and the requirements in this specification.

• If the user finds a problem after unpacking, including appearance damage, the supplier shall replace the equipment with the same model within a time agreed with the user.

• During the warranty period, the supplier shall repair defects and supply parts without charge, or replace the product as needed. After warranty, technical consultation and spare parts shall remain available.

• During warranty, technical support shall be free by phone or email. Respond within 24 hours of a fault report, or within 2 hours in an emergency. Resolve the fault within 72 hours; otherwise the buyer may take necessary measures, with resulting risk and cost borne by the supplier.

• Throughout the design service life, genuine original spare parts shall remain available to support normal operation.