



# ION L6000 G2

## Rack Mount Load Bank

6kW - 1.1kW \* 6 Increments

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## User Guide

It's critical that your standby power systems like UPS, battery banks, generators, transformers, inverters etc are working in good condition when the mains are not available.

Downtime could be reduced by regular maintenance and thorough inspections which are the key to power supply system's maintenance. Critical power backup equipment like UPS and generators which especially located in harsh, dusty or corrosive environment will fail without proper preventative maintenance. So, validating the condition and output of such power systems must be conducted comprehensively. ION provides a whole range of custom preventative maintenance products solutions for UPS systems and generators and many more to ensure constant uptime for your power systems and make you prepared for anything.

Following on from construction and testing, Data Centre Commissioning is essential to ensure that the completed facility is configured for maximum efficiency. Missing out the essential Data Centre Commissioning can lead to an inefficient facility and higher than expected operational costs. By simply identifying where equipment manufacturers' standard specifications are not appropriate for the IT load, the supporting infrastructure, in particular the cooling systems, can be configured to meet the requirements of the facility and lead to much higher levels of efficiency. Data centre commissioning can lead to significant energy savings when implemented correctly by a specialist commissioning team. By engaging ION UPS to ensure that systems are running correctly, clients have saved up to 67% on facility operational costs.

The ION rack mounted AC & DC load banks are designed especially for internet data centre (IDC) test and commissioning. Load bank integrated system test (IST) could precisely simulate the data centre's electricity consumption, heat dissipation, air flow, hot & cold aisle testing, thus to ensure the effective operation of power supply & distribution system (generator, UPS, EPS included), air conditioning system, lightning protection and earthing system, monitoring system, data centre integrated environments, cabinet IT environment, providing independent verification of integrated system testing. Successful IST (integrated system test) should have installation of server load banks in data centre and server room etc, ION provides resistive, reactive and capacitive load banks in low or medium voltage to cover the entire scope of your commission and testing requirements.



#### Applications:

- Data centre & server room cooling system test
- Data centre air flow, hot/cold aisle environment inspection
- Validating the tire level of data centre
- Validating the reliability of data centre power supply & distribution system
- Testing the main network before connecting user devices (servers, switches, etc)

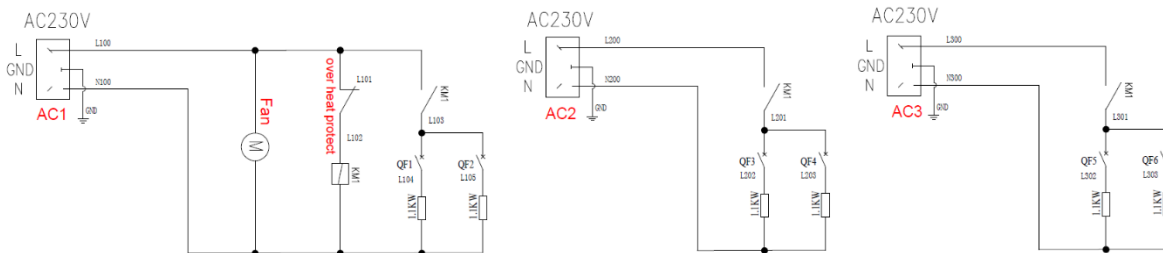
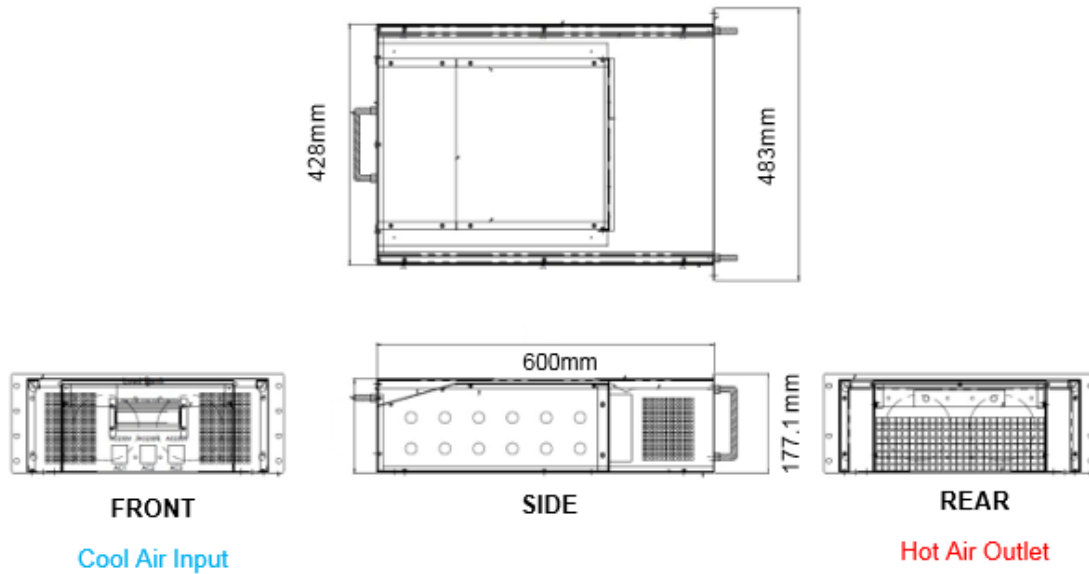
| Technical Specifications |   |
|--------------------------|---|
| Model                    | ION L6000 G2  |
| Load Element             | Stainless steel resistor                                      |
| Load Voltage             | AC230V single phase, 50/60Hz                                  |
| Rated Power              | 6.6KW @ AC230V  |
| Load Steps               | 3 independent load channels: AC1, AC2, AC3                    |
|                          | AC1 Load Channel (Fan power supply also): 2*1.1KW             |
|                          | AC2 Load Channel: 2*1.1KW                                     |
|                          | AC3 Load Channel: 2*1.1KW                                     |
|                          | Total 6 load steps: 1.1KW*6                                   |
| Power Factor             | PF=1  |
| Load Accuracy            | ±5%   |
| Power Supply             | Fan activated by AC1 cable: 230V 1phase 50Hz from test source |
| Control Mode             | Manual control by mini circuit breaker                        |
| Insulation Class         | F   |
| Protection Level         | IP20(indoor use)  |
| Fan Noise                | 75dB  |
|                          | Fan force-air cooling, powered from the test source.          |
| Cooling Mode             | Cool air intake at front, hot air exhaust at rear.            |
|                          | Fan activated by AC1 cable: 230V 1phase 50Hz from test source |
| Work Mode                | Continuous work   |
| Ambient Temperature      | -10°C~+50°C   |
| Load Input Cables        | Three C19-C20 cables (Or other as per requested)              |
| Dimension                | 4U 19-inch rack, depth 600mm                                  |
| Weight                   | 19KG  |
| Mobility                 | Two front handles and one rear handle                         |
| Humidity                 | ≤95%  |
| Altitude                 | ≤2500 meters  |

**NOTE: Each load bank includes the standard items:**

1. One Load Bank Main Unit.
2. Three C19-C20 1m cables

## ION L6000 Load Bank

Below is a diagram of the ION L6000 rack mounted load bank



### IMPORTANT:

Please read the designed diagram and manual before any operation.  
Please **DO NOT REMOVE** AC1 cable during loading to ensure cooling available.

## **Loading Wiring Preparation**

1. Make sure all breakers and power supply are off before any connection.
2. Wiring connection between load banks and test source by the provided three C19-C20 cables.
3. Check again to make sure all connections reliable.

## **Load Bank Loading Operation**

1. Power on the test source (or equipment under test)
  2. Fans are activated as soon as the test source is on (IMPORTANT NOTE: FAN is activated by AC1 cable, DO NOT remove AC1 cable during loading)
  3. Push on/off the 3 load channels breakers to adjust the load power
- IMPORTANT NOTE: DO NOT remove AC1 cable during loading

## **Load Bank Unloading Operation**

1. Push off all the 3 load channels breakers to remove the load power
2. Remove AC2 & AC3 cable
3. Remove AC1 cable after 10-15 minutes cooling at the end.