



## OREN-DC450V-260A-R Resistive DC Load Bank



### Why need load bank testing

It is really critical to ensure that your standby power supply system say UPS(uninterrupted power supply), battery bank, generator, transformers, inverter etc which especially located in harsh, dusty or corrosive environment working in good condition, when you need them most, if switched to be loaded when the main power supply in maintenance procedure or stop abnormally.

Such power supply systems could fail without proper preventative maintenance. OREN provides a whole range of custom preventative maintenance products solutions for your UPS systems, generators and many more to ensure constant uptime for your power systems and make you prepared for anything. Downtime could also be reduced by regular maintenance and thorough inspections which are the key to power supply systems maintenance.

OREN AC/DC load banks could help highlight a large range of faults on the power supply systems it test. The first goal achieved when testing with OREN AC/DC load bank is to ensure your power supply system is reliable or not by validating the power systems' outputs to its technical specifications. The underlying question that OREN series AC/DC load bank could answer you is--"how is my power supply systems constant uptime(technical performance) ?" The load bank also tests that the power supply system is not faulty, no faults in construction and components reliable, that the aging of the power supply system is in line with expectations and that there are no pending breakdowns or early signs of wear and tear.

- OREN series AC/DC load bank testing offers you whole solutions of predictive failure analysis for UPS(uninterrupted power supply), generator, transformers, PV system, inverter etc, to validate the condition and output of such power systems comprehensively. Integrated AC & DC load bank could be made in one unit or separately with different load voltages as per your need for different applications.

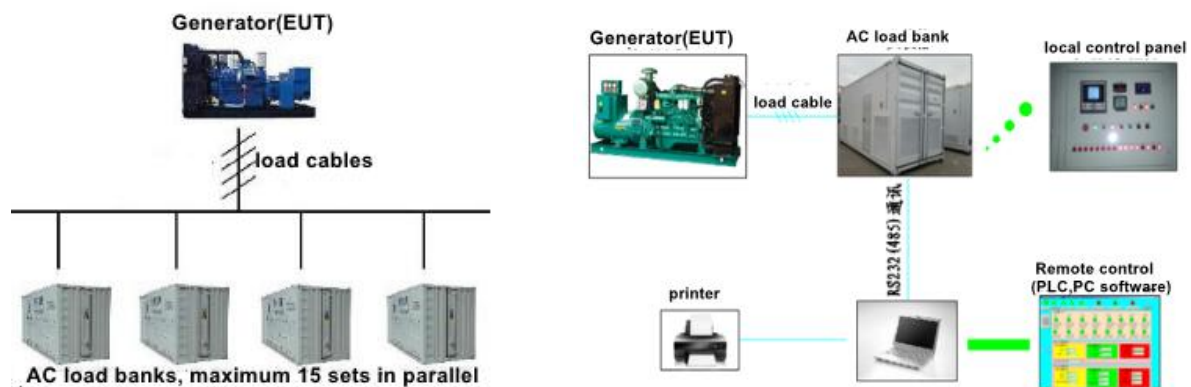


### About OREN load banks resistor

Highly reliable and durable new alloy resistor is used for the OREN's AC & DC load bank. It is thermal shrinkable and seal installed in the stainless steel pipe, whose surface with insulated heat sink. The resistor is moisture-proof, anti-corrosion, good heat dissipation, high insulation resistance, safe and reliable.

### OREN load bank control modes

Two control modes available for OREN AC/DC load banks: The local panel control mode and the remote control mode by PLC through PC software. Local control mode will be locked once load bank is switched to remote control mode. By applying the PLC, we could make load bank an intelligent test system, load power curve could be preset through PC software and all electrical parameters of EUT(equipment under test) including current, voltage, apparent power, active power, reactive power, power factor, frequency and warning info could be achieved automatically by the PC software and displayed by load bank digital meter. Up to 15 load banks at most could be parallel controlled by PC software which generating the test tables, curves and standard test report.















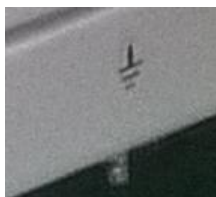

Technical Specifications	
Model	OREN-DC450V-260A-R Resistive DC Load Bank
Load Element	Alloy resistors
Load Voltage	DC450V 1 phase 2 wire
Load Power	260A@DC450V 1 Phase 2 Wire(117KW)
Load Steps	1/2/2/5/10/20/20/50A*4@DC450V (1-260A adjustable@DC450V)
Power Factor	PF=1
Load Accuracy	±5%
Digital Meter	Displaying the voltage, current, frequency, active power, reactive power, power factor and energy.
Power Supply	240V 50Hz, single phase
Control Mode	Manual control by push buttons
Wire Connections	1P2W bus bar for load cables connection
Insulation Class	F
Protection Level	IP20(indoor use)
Fan Noise	75dB
Cooling Mode	Force-air cooling
Work Mode	Continuous work
Protections	Overheating/Buzzer alarm, Overheating protection, emergency stop button
Dimension-Weight	600*1000*1553mm(W*D*H)
Ambient Temperature	-10℃~+50℃
Mobility	Four wheels
Humidity	≤95%
Altitude	≤2500 meters



### Load Bank Control Panel Explanation

Component Picture	Name	Function
	EPO	Emergency Pause Operation (Press to stop, rotate to release)
	Fan	Fan power with built in light indicator. Keep fan cooling 10-20 minutes before power off after unloading
	Meter	Digital meter displaying the voltage, current, frequency, active power, reactive power, power factor and energy.
	LC	Load steps control switch with built in light indicator
	TL	Over temperature(85°C) buzzer alarm
	Load Steps: push buttons	Push on/off to adjust the load power
	Load Cables Connection Terminals “+” & “-”	Connect one end of the 2 load cables with terminals “+” & “-”, the other end of load cables to EUT connection terminals



	AC240V Power Supply Socket	Plug in the power cord to load bank socket with 240V single phase
	Power Cord	240V power cord
	ON-OFF Wheels	Press ON to lock the wheel Press OFF to unlock the wheel
	Grounding connection	Grounding before load bank testing
	Diagram	Load bank internal wiring connection Primary and secondary diagram

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

- ① Load Bank Main Unit--1 set
- ② Main Unit Power Cord--1 pcs (inside load bank)
- ③ Products primary and secondary diagram (Products components wire connection diagram)--1 pcs (digital copy)
- ④ User Manual--1 pcs (digital copy)


**Load Bank Operation Guide**

- ① Make sure all load bank switches and EUT(equipment under test) are **POWER OFF** before connections.
- ② Plug in the power cord to load bank power socket
- ③ Make load cables connections between load bank connection terminals and EUT terminals accordingly by sequence of phase “+” & “-”. Make sure from one cable to another.
- ④ Check again to make sure all load cables connection reliable.
- ⑤ Load bank mains supply power on, push on the green “**Fan**”--**fans working**.



- ⑥ Power on the EUT
- ⑦ Push on the red load steps control switch “LC”--ready to load test.
- ⑧ Turn on/off the load steps push buttons to adjust the load current.



- ⑨ Press  key to view data accordingly
- ⑩ Turn off all load steps push buttons **firstly** and then “LC” to cut off all load power.

**11** Keep fans **COOLING 10-20 minutes**, then **off** the push button “Fan”

12 Cut off load bank & EUT power supply, remove all load cables.

Note:

- Remote control function is optional
- AC & DC load voltage could be made compatible in ONLY one unit with several different load voltages.
- **OREN DC450V 260A DC load bank could be applied to voltage system not more than DC450V, with load current/power vary accordingly due to OHM LAW.**