



50
Years of Excellence
— SINCE 1969 —

UNIVERSAL LOAD BANKS

500KW LIQUID COOLED LOAD BANK

The Model ULB R500WT or R500WC is a modern, medium capacity resistive load bank system intended for data center testing requirements. Designed for indoor/outdoor installation, the load bank features stainless steel tank and plumbing, sturdy powder coated steel structure and industry standard cooling and electrical connections.



Features:

- Zero Leak Design
- Unique High Efficiency Custom Heaters
- Leak Proof Fluid Connections
- Extended Range Flow Meters
- Proportional Control Valves
- Intuitive HMI control screens
- Outdoor rated construction
- Network multiple load banks
- Advanced Color Touchscreen for Control and Monitoring

Load Bank Ratings:

- Standard Capacity rating of 500 kW
- Standard Voltage rating of 380 VAC, 415 VAC or 480 VAC, 3 Phase, 50/60 Hz
- Load step resolution 5kW at 415 VAC or 480 VAC

Control Power:

Provided by an integral dual voltage 120V control power transformer or external 120V power source.

Liquid System:

The load bank features two vertical stainless steel tanks. Heaters mounted within the tanks dissipate heat to the surrounding liquid that is flowing through leak proof tanks. Liquid flow is carefully controlled to ensure that water temperature rise, doesn't go above a predetermined level. Flow, Temperature and system pressures are monitored and maintained carefully.

Construction:

All WT/WC series load banks are designed to Nema 3R type standards for outdoor operation.

Liquid Circuit

- Stainless Steel Piping, tank
- Two Separate Liquid Circuit (with independent/individual control & sensors) operates as single combined flow control or dual flow/power control.
- When optimal conditions exist, 2 circuits with dual input and output will allow operation of two separate load-flow circuits.
- The circuit will allow control of one or more of the following various operational modes.
- Power, kW control
- Temperature rise, delta temp (Out-In)
- Outlet temperature
- Liquid flow Control
- Liquid Pressure Drop (In-Out)

System Digital Controls:

Integral PLC and Color Touchscreen HMI. Volt, Amp, Frequency, kW monitoring along with real time data acquisition.

HMI screens include Power Data, Safety, Screen Capture, Data Logging and Maintenance.

Network multiple load banks from a single HMI. A USB port is included for Data download and software/ firmware updates. An ethernet port is provided to mimic the screen using free software for remote control.





50
Years of Excellence
— SINCE 1969 —

UNIVERSAL LOAD BANKS

500KW LIQUID COOLED LOAD BANK

Leading Parameters

Flow Control – 10 to 300 gpm

Power Control – 5 to 500 kW

Measurements

- Liquid Pressure (psig) -IN, OUT, ΔP
- Liquid Temperature ($^{\circ}F$) IN, OUT, ΔT
- Liquid Flow (gpm), 10 to 300 gpm
- Power – kW, Voltage, Amps
- Pressure Rating – 70 psig.
- Test Pressure – 105 psig

Alarms (Auto Variable & Fixed Selection):

- Over Pressure
 - Over Temperature
 - Low Liquid Pressure
 - Low Liquid ΔP
 - High Temperature Rise
 - Heater Sheath Over Temperature
 - Lower Liquid Flow
 - Over Voltage
- Flow Channel #1 and/or #2 – All related controls as noted above

Sensors:

K-Type Thermocouple - Temperature Flow meters -
Coolant flow
Pressure transducers-System pressure

Enclosure:

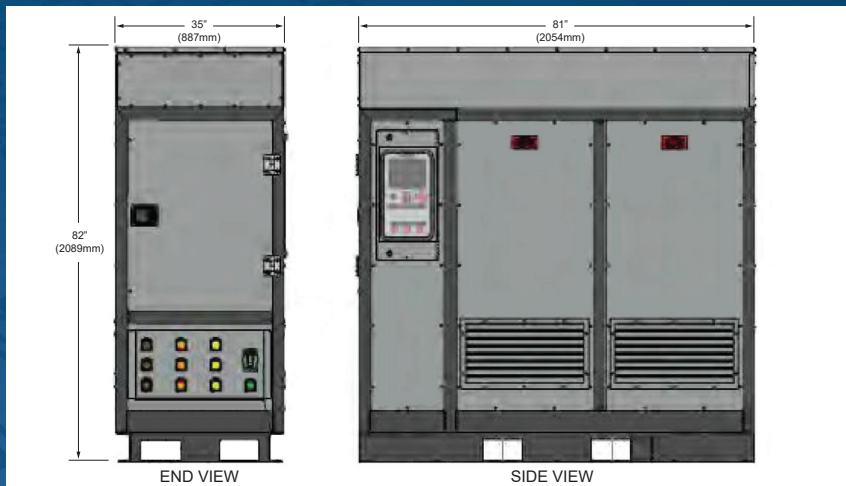
Heavy gauge steel with powder coat finish. RAL 7042 Color with Matt Finish Polyester Powder Coat. Hinged access doors and fastened panels with lockable latches.

Power Connections:

Industry Standard color coded quick disconnect connectors are provided.

Resistor Elements:

Tubular or Cartridge elements made out of stainless steel / Incoloy with reduced watt density for immersion fluid or liquid application, with efficient heat transfer rate for lowest sheath temperature w/o any vaporization of fluid on sheath.



Mobility:

Unit is designed for easy transport and features high impact caster wheels and forklift pockets. Floor Lock is provided.

Certifications:

UL & cUL Listed (pending). Manufactured in an ISO-9001:2015 certified facility.

Dimensional Information:

35 W x 81 D x 82 H (inches).
88.7 W x 205.4 D x 208.9 H (cm)
Approximate weight of 2200 lbs /1000 Kgs

Available Options:

Extended warranty, 1kW resolution, Quick Disconnect liquid (QD) couplings, Remote Handheld HMI with 50' connection cable, wireless capability.

Warranty:

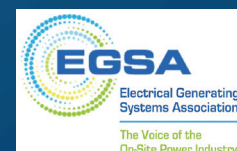
Two (2) years after shipment for parts and labor. All warranty repairs is conducted at ULB Wixom.

Specifications subject to change without notice

Follow us on:



Proud Member



UNIVERSAL LOAD BANKS • 52119 Grand River Avenue • Wixom, MI 48393 USA • Phone: 248-571-4125

Ordering/Contact Info: email: sales@universalloadbanks.com
www.universalloadbanks.com