



The Avtron Model 1500 are resistive, AC load banks designed for rooftop mounting when up to 600 kW of supplemental load is required.

## LOAD BANK RATINGS

Standard capacity ratings of:

- 10 - 600 kW (based on exhaust opening, core height and width)

Standard load step resolution is nominal 20-25% of load bank capacity (kW).

Select from standard three phase voltage ratings of:

- 208-60Hz
- 480-60Hz
- 600-60Hz

Please consult factory for non-standard ratings.

## Cooling System

The 1500 load bank is designed to permanently mount on the roof of a sound attenuated enclosure. Cooling air is provided by the plenum exhaust area (or cut out). The load bank requires a minimum CFM airflow (Cubic Feet per Minute) for proper operation. Required CFM for the load bank is based on the exhaust opening, height and width dimensions.

## Operator Controls

The standard load control for the 1500 is a remote manual control. Typical control functions include: Power On/Off switch, Master Load On/Off switch, and Individual Load Step switches. Visual indicators include: Power On and Over-Temperature. Control panel will be housed in a wall mount enclosure for customer interconnection.

Other control options are available, please consult factory.

## Construction

The 1500 load banks are constructed using heavy gauge aluminized steel per ASTM A463. Aluminized steel is the preferred construction material for radiator mounted load banks due to its high temperature rating and superior corrosion protection. The load banks comes standard with outdoor type construction.

All exterior fasteners are stainless steel. The main input bus bar assembly is located within the main load bank enclosure. The 1500 load bank is built to the latest NEMA, NEC, and ANSI standards. The 1500 load banks are listed to UL standard 508A (up to 600 kW).

## Finish

The 1500 is designed for outdoor operation and will feature a high quality baked polyester powder coat finish. The standard color is gray (ANSI 61).

## Two Year Warranty Included

The equipment is covered by an industry exclusive 24-month parts and labor warranty.

# Model 1500 Specifications

## Resistor Elements

Avtron load banks use helically wound chromium alloy Helidyne elements. Elements are fully supported across their entire length by segmented ceramic insulators on stainless steel rods. These elements are designed to operate at approximately 1/2 of their maximum continuous wire rating.

Elements are positioned within the cooling airstream for optimal performance. Changes in resistance due to temperature are minimized by maintaining conservative watt densities.

The overall load tolerance of the load bank is -0, +5%. This ensures that advertised kW is delivered at rated voltage.

The elements are continuously rated at the specific voltage. Tests at lower voltages, with a corresponding reduction in overall rating, may be carried out.

## Safety Features

An over-temperature switch is provided and interlocked with the load application controls. If an over-temperature condition exists, load will automatically be disabled.

Major fault protection is provided by branch circuit fuse protection.

Control circuit is fuse protected.

The exterior of the load bank will have appropriate warning and caution statements on access panels.

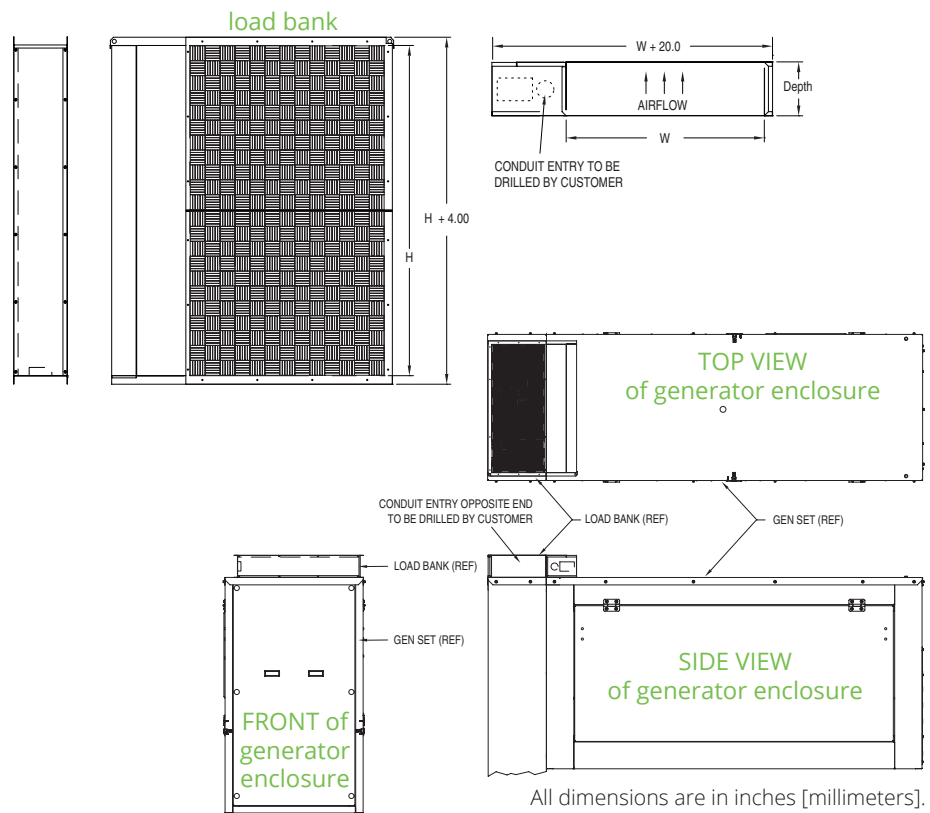
Internal access is restricted by bolt on exterior panels.

## Ambient Temperature

The 1500 load banks are designed for continuous duty cycle with no limitations. The ambient temperatures range is -20°F to 120°F (-28°C to 50°C).

## Mounting

The 1500 load banks mounts directly to exhaust area on the enclosure. Exact radiator core dimensions are required at time of order.



## Power Terminals and Cable Entry

Properly sized input bus bars are provided for load cable installation. Recommended cable entry area is referenced in above outline drawing.

## Optional Accessories

- Control Power Transformer
- Automatic Load Control (ALC)
- Critical Power Management Systems (CPMS) Interface
- Reverse Power Relay (Regen Applications)

## Documentation - Operating Manual

A comprehensive operator's manual is supplied electronically via a USB drive.

Sections include: Safety, Installation, Operation, Maintenance, and Troubleshooting.

## Testing and Standards

Avtron load banks comply with NEMA, NEC, and ANSI standards. Quality control system is certified to ISO9001 standards.

## Weight and Dimensions

### Load Bank Weight (approx.)

Weight varies based on capacity, frame size, and options