



## Avtron 4000 SERIES Permanent Load Banks



[avtronpower.com](http://avtronpower.com)

**AVTRON**  
POWER SOLUTIONS



# Avtron 4000 SERIES Load Banks





Avtron 4000 SERIES load banks are outdoor-rated resistive units for testing power supplies at unity power factor.

Featuring rugged, heavy-duty construction, 4000 SERIES load banks are designed for continuous use and are built to withstand the rigors of varying climatic conditions.

Models from 50 to 4000kW are available in a wide range of voltages. Remote manual SIGMA 2 control is standard and other digital controls are available as options when networking, Modbus, or building management systems interface is required. 4000 SERIES load banks are suited for mission-critical, data center, equipment rental, service and generator maintenance, factory testing, and renewable energy applications.

## Product Knowledge

[Load Bank Overview Brochure](#)

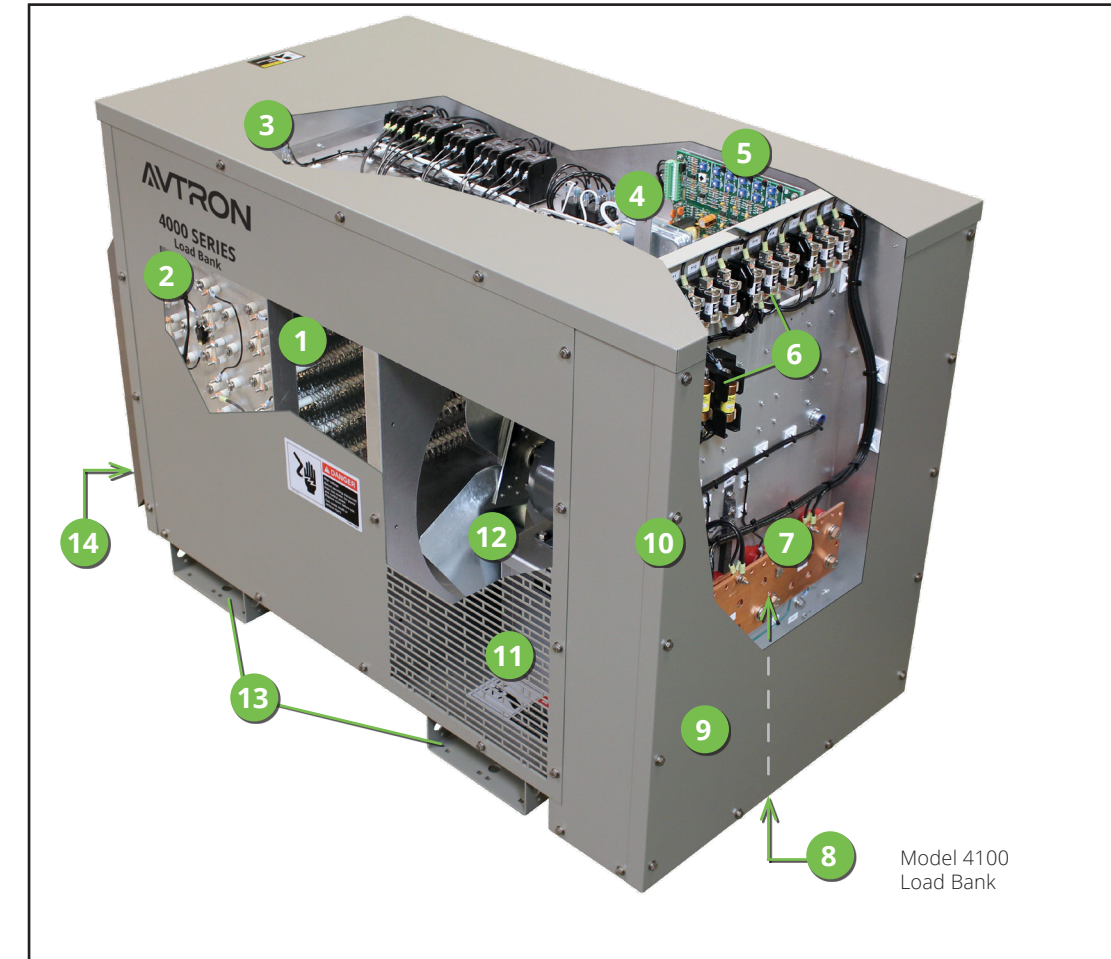
-  Resistive Only
-  Capacities from 50 to 4000kW
-  Best-in-class SIGMA controls
-  Permanent or Trailer-Mounted Options



Model 4600 Load Bank

# 4000 SERIES Features

4000 SERIES load banks present unique features that provide reliable and accurate load testing for any applications.



Model 4100 Load Bank



Avtron 4000 SERIES Load Banks provide reliable and accurate load testing for a wide range of applications.

- |  |   |   |
|--|---|---|
| <p><b>1</b> Avtron designs and manufactures Helidyne Resistor Elements to provide extended, reliable performance. Corrosion-resistant chromium alloy provides years of trouble-free service.</p> <p><b>2</b> Segmented Ceramic Insulators and Stainless Steel Rods provide unmatched element support. Years of design innovations and field studies have resulted in the most reliable resistive element assembly available.</p> <p><b>3</b> Over-Temperature Protection automatically drops applied load if an over-temperature condition is detected.</p> <p><b>4</b> Differential Air Pressure Switch protects the unit protection by dropping applied load if cooling airflow is not detected.</p> | <p><b>5</b> Available Automatic Load Control maintains a minimum load value on power source by monitoring building load. The load controller will automatically adjust load to maintain its target value. A loose current transformer is provided for feedback to the controller.</p> <p><b>6</b> Branch Circuit Fuse Protection limits fault current and protects components during phase-to-phase or phase-to-ground shorts.</p> <p><b>7</b> Input Bus Bars connect incoming power cables.</p> <p><b>8</b> Conduit Entry Area provides a removable gland plate for easy stub-up access to input bus bars.</p> <p><b>9</b> Aluminized Steel Construction with Powder Coat Paint Finish provides superior heat deflection and corrosion protection.</p> | <p><b>10</b> Stainless Steel Hardware provides enhanced corrosion protection.</p> <p><b>11</b> Screened Cool Air Intakes on both sides of the load bank allows cool airflow and prevents damage from foreign objects.</p> <p><b>12</b> Integral Blower Motor and Fan Blades are integral to load bank and engineered to provide proper cooling airflow and motor circuit protection.</p> <p><b>13</b> Forklift Pockets provide easy transport and mounting.</p> <p><b>14</b> Louvered hot air stream exhaust.</p> |
|--|---|---|

# SIGMA 2 Control

SIGMA is the embedded multifunction control platform for Avtron load banks. It is flexible, feature-rich, and cost-effective. The platform offers intelligent, accurate, and user-friendly control. This provides facilities with best-in-class test and data acquisition capabilities, including:

- ability to network multiple load banks
- control for one or many load banks from a computer or a hand-held device
- communication with building management, Modbus, or SCADA systems for unified site control



SIGMA 2 is a sophisticated load bank control solution that offers advanced instrumentation, ISO8528-compliant data acquisition, and site load correction for any application.

## Product Knowledge

[SIGMA Load Control Overview Brochure](#)

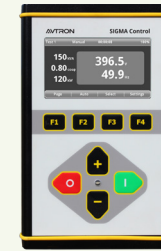
[SIGMA 2 Brochure](#)

[Benefits of Networking Load Banks](#)

# 4000 SERIES Models

Avtron 4000 SERIES Load Banks are available in the following configurations and can be customized to meet the needs of specific applications.

## SIGMA 2



**4100** | 50-150 kW



**4500** | 200-500 kW



**4600** | 500-1250 kW



**4900** | 1000-2500 kW



**4800** | 400-3000 kW



**4950** | 3000-4000 kW

# 4000 SERIES Specifications

Model Name	Capacity (kW)	Frequencies Available (Hz)	Voltage Range (V)	Ambient Temperature Range	Hot Air Discharge Direction	Control Options	Optional Extras
4100	50-150	50, 60, 50/60	400-600	-20°F to 120°F	Horizontal	Remote, Local Manual Control, Pilot Relays, Remote I/O, PLC, SIGMA	Control Power Transformer, Digital Metering, Auto Load Control, Arctic Grade, Fine Resolution
4500	200-500						
4600	500-1250						
4900	1000-2500						
4800	400-3000	50, 60, 50/60	400-600	-20°F to 120°F	Vertical	Remote, Local Manual Control, Pilot Relays, Remote I/O, PLC, SIGMA	Control Power Transformer, Digital Metering, Auto Load Control, Arctic Grade, Fine Resolution
4950	3000-4000						

Follow the links to web page for each model.



[www.avtronpower.com](http://www.avtronpower.com)

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