

Generator & UPS Systems AC Load Bank Range

Features:

- Horizontal forced cooled resistive load bank
- Intelligent Remote Hand Held Controller
- Safety: Twist Lock Cable Connectors
- Safety: Isolation Contactors
- Safety: Fan fail shut down & emergency stop
- AC Digital Panel Power Meter
- Parallel Operation
- AC LoadView Software



The Hillstone **HAC series load banks** are a horizontal low profile design, used for AC testing of generators & UPS systems and can easily be transported on a standard road trailer.

Supplied in 3 power ratings: **300kW, 400kW, 550kW** with full adjustment from 1kW load step resolution via the remote hand held controller - iHHC.

All units are supplied with recessed panel mounted: power lock connectors, digital power meter; controls inc emergency stop and comms ports to the Hillstone AC LoadView datalogger.

Multiple (4) HAC load banks can be connected together to increase the total load array for increased load testing.



Rating Table

Type No.	Max Volts	Power at 415V	Amps at 415V	Power at 400V	Amps at 400V	Power at 380V	Amps at 380V
HAC415-300	415V	300 kW	416 A	399 kW	275 A	252 kW	381 A
HAC415-400	415V	400 kW	555 A	367 kW	367 A	336 kW	509 A
HAC415-550	415V	557 kW	774 A	511 kW	741 A	468 kW	709 A

Note: the Max Volts rating is set for the regulated output of a Genset or UPS System and not the high voltage of UK mains.

iHHC2 Controller

The HAC range of load banks are controlled by the Hillstone iHHC intelligent hand held controller

Features include:

- 1kW load selection
- On the 'fly' load Impact adjustment

Control up to 4 load banks to a maximum of 2200kW



AC LoadView datalogger

The **LoadView data logging** software system is a free to download and use app that allows graphical and data reporting (pdf) of the load delivered to the datacentre during the load bank test.

- Datalog all test parameters and recorded to a SD card and saved in CSV file format
- Phase and Line Voltages & Amps, kW, KVar, KVA, PF, Frequency.
- **LoadView** runs on Windows 10



HAC415 Case Sizes

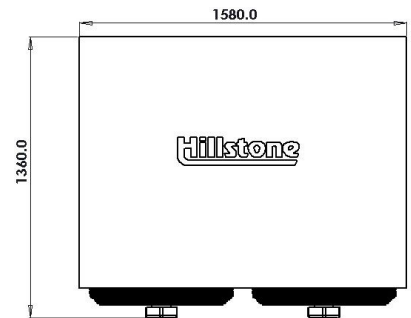
	Wide	Deep	Height	Approx. Weight
HAC415-300	1580mm	1360mm	970mm	300 Kgs
HAC415-400	1580mm	1360mm	970mm	325 Kgs
HAC415-550	1580mm	1360mm	970mm	350 Kgs

HAC415 300kW - 550kW GA diagram

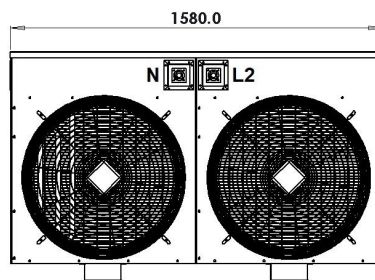
The lightweight compact aluminium case design makes the 550kW load bank ideal for mounting on a road trailer. At less than 1m high and with a small foot print to weight ratio this design opens up great possibilities of delivering portable proof load testing of gensets and UPS Systems



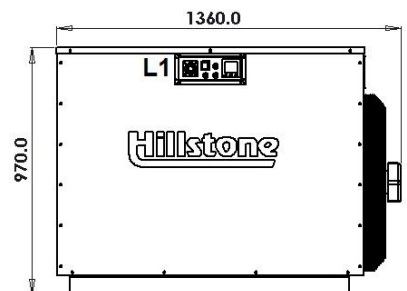
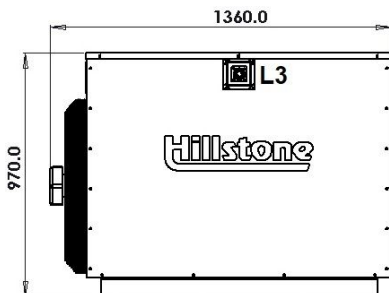
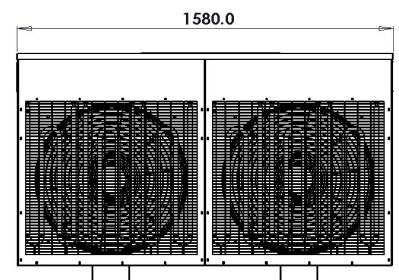
Top View



Horizontal (side on) airflow inlet



Horizontal (side on) airflow exhaust



Narrow width dimensions for fitting to single axle road trailers

HAC Specification

HAC415 300kW to 550kW	
Description	Outdoor, Adjustable, Resistive AC Loadbank
Max Voltage	415V, 3 Phase, 4 Wire Star Connection, plus Earth
Rating	Continuous duty cycle operation with no limitations See HAC Range Rating Table above
Frequency	50 Hz (60Hz optional at extra cost)
Load Adjustment	1kW to maximum available power via iHHC2 Hand Held Controller
Controls & Indication	Power On Indicator lamp Fan Blower On / Off control switch with Indicator Light
Micro Controller	32 bit microprocessor PLC , running Hillstone HAC software
Cable Termination	Panel mounted, none interchangeable, fast connection twist lock safety connectors for external cables to L1, L2, L3, N and Earth
Cooling	Dual 3 phase horizontal forced air cooling fan, TEAO type, powered from the test source Fan overrun to cool elements during the run down period Intake openings are designed to prevent objects greater than 50mm diameter from entering the unit Fan blade material cast aluminium / non-corroding material
Element Type	Removable, Insulated, air cooled, Incoloy stainless steel, sheathed resistor elements designed for continuous air cooled duty in black heat and is insulated to prevent short circuit or electrocution
Circuit Protection	Fan motor overload and resettable circuit breaker protection included Interlocked Alarms: Temperature, Phase sequence Emergency Stop push button
Alarms	Over Temperature Alarm Indicator Light Fan Alarm Indicator Light Phase Rotation Alarm Indicator Light All alarms are electrically interlocked with the load application controls to prevent load from being applied if an alarm condition is present
Measurement	Panel mounted Din72 digital power meter; Phase and Line Voltages & Amps, kW, KVar, KVA, PF, Frequency
Comms	2 x MODBUS ports for iHCC2 & parallel operation 1 x MODBUS port for AC LoadView datalogger
Environmental Protection	Weatherproof design for outdoor operation Electrical control chamber IP54, Recessed control panel IP67, Element chamber IP21
Construction	Lightweight Aluminium frame with recessed connector panels, drip lid & stainless steel exhaust grill

Finish	Powder textured finish, 120 micron coating
Markings and notifications	<p>Rating Label: Silver background, Black letters; Hitack polyester label, High temperature resin print, Reflective UV coating, -25oC to +120oC, weatherproof outdoor rated</p> <p>Safety Label: Yellow background, Black letters; Ultra bond vinyl thermal transfer, -40oC to + 80oC, weatherproof outdoor rated</p> <p>Engraved Control Panel: Brushed aluminium with back ink filled letters</p>
Operating Temperature	0 - 55°C
Storage Temperature	0 - 80°C
Installation	<p>Designed for permanent installation and outdoor operation.</p> <p>Floor fixing points are provided in the base</p>
Movement	Base fork pocket for forklift movement or fixing onto a road trailer

Standards And Quality Assurance

The **HAC415 AC Load Bank Range** is manufactured in the UK to the following UK / EU standards and ISO procedures:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC
- BSEN61000-6-3 2007 amendments for 2011
- BSEN61000-6-1 2007
- BSEN61000-6-4 2007 amendments for 2011
- Hillstone Products Quality Assurance procedures ISO 9001:2015



Notes

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