

## **SINGLE PHASE RACK MOUNTED SERVER EMULATORS**

We have 3 options for single phase rack mounted server emulators, ranging from a simple load, server emulator to a High-Density Server Emulator. Units are installed at the front of an IT rack and connected to the customer power strip (or we can provide a number of power distribution options).

The MK2 and MK3 2kw units are switched fan only, 50% and 100% load. The MK4 3.5kw units are switched fan only, 50%, 70% and 100% load. Operating the units at 50 or 60Hz makes no difference to their performance.

Our rack mounted server emulators can be installed into customer racks or our 30U Temporary Racks.



## MK4 3.5KW EMULATOR



Our most powerful server emulator to date. The 4th generation of HeatLoad emulators can produce a maximum of 3.5KW per unit. The MK4 unit enables customers to switch between settings of fan only, 50%, 75%KW and 100% capacity. With the lowest Delta-T in the range, the MK4 will provide the most accurate replication of a server in terms of airflow and temperature rise.

## MK3 2KW EMULATOR

The Mk3 server emulator is typical a customer favourite predominantly because of its compatibility with a much broader selection of power distribution units. MK3 units can be connected to C13, C19, UK 3Pin and CEE7 sockets. The emulator can be switched between fan only, 50%, and 100% capacity.



## MK2 2KW EMULATOR

An early vision of what was to become the MK3 unit, the Mk2 unit is considered our budget option. Although it's Delta-T is higher than either of the MK3 or MK4 models, it still has a capacity of 2KW per unit. Like the MK3 emulator, the MK2 can be switched between fan only, 50% and 100% capacity.

## RACK MOUNTED SERVER EMULATORS SPECIFICATIONS

Description									
Model	MK2 - USHD60		MK3 - USHD120		MK4 - USHD250				
Maximum Capacity - Packaged Load Bank	2000 W / 8.5A		2000 W / 8.5A		3500 W / 16A				
Voltage Ranges (Continuous Operation)	210-230 VAC		210-230 VAC		210-230 VAC				
Frequency	50Hz		50Hz		50Hz				
Phases	Single Phase		Single Phase		Single Phase				
Wires	1x3-Core 1.5m 1.5mm Power Cable		1x3-Core 1.5m 1.5mm Power Cable		1x3-Core 1.5m 1.5mm Power Cable				
Number of Steps / Load Step Resolution	2 / 1000(50%)-2000(100%) W		2 / 1000(50%)-2000(100%) W		3 / 1750(50%)-2625(75%)-3500(100%) W				
Voltage Tolerance (Short Term Operation)	Nominal + / -5%		Nominal + / -5%		Nominal + / -5%				
Load Element Tolerance	Nominal + / -10%		Nominal + / -10%		Nominal + / -10%				
Elements	Nickel/ Chrome Alloy Resistive Wire		Nickel/ Chrome Alloy Resistive Wire		Nickel/ Chrome Alloy Resistive Wire				
Insulation Grade	Conform to BS 6231 Type CK		Conform to BS 6231 Type CK		Conform to BS 6231 Type CK				
Auxiliary Supply Type	Temporary / Test		Temporary / Test		Temporary / Test				
Auxiliary Supply Voltage Range	220-240V / 1ph / 50Hz		220-240V / 1ph / 50Hz		220-240V / 1ph / 50Hz				
Auxiliary Rating	16A		16A		16A				
Auxiliary Connection Type	C20		C20		C20				
Control									
Control	Rocker Switches Fan Only, 50% & 100% Power Indicator Neon		Rocker Switches Fan Only, 50% & 100% Power Indicator Neon		Rocker Switches Fan Only, 50%, 75% & 100% Power Indicator Neon				
Protection	Over temperature protection thermostat		Over temperature protection thermostat		Over temperature protection thermostat				
Misc.									
Load Connections	C20 Connector		C20 Connector		C20 Connector				
Cooling Method	Tangential Fan - Forced Air Convection		Tangential Fan - Forced Air Convection		Tangential Fan - Forced Air Convection				
Exhaust Air Temperature (Approx.)	Ambient + 15°C-30°C		Ambient + 10°C-18°C		Ambient + 6.5°C, 10°C & 16°C				
Air Flow (Approx.)	60L L/S		120L L/S		250L L/S				
Emergency Thermal Cutout	42°C (No Reset)		42°C (No Reset)		82°C (No Reset)				
Load Switching Type	Resistive		Resistive		Resistive				
Load Switching Contractor Type	N/A- Circuit Protection Remote		N/A- Circuit Protection Remote		N/A- Circuit Protection Remote				
Rated Maximum Ambient Temperature Oper	Nominal 45°C		Nominal 45°C		Nominal 45°C				
Rated Minimum Ambient Temperature Oper	Nominal -10°C		Nominal -10°C		Nominal -10°C				
Rated Maximum Ambient Humidity	95% RH - Non Condensing		95% RH - Non Condensing		95% RH - Non Condensing				
Altitude Rating	< 2500 m Above Sea Level		< 2500 m Above Sea Level		< 2500 m Above Sea Level				
Enclosure	Zinc-Coated steel with Powder coated		Zinc-Coated steel with Powder coated RAL5002 Satin Ultramarine Blue		Zinc-Coated steel with Powder coated RAL5002 Satin Ultramarine Blue				
Minimum Inlet Clearance	300mm		300mm		300mm				
Minimum Outlet Clearance	300mm		300mm		300mm				
IP Rating	IP20		IP20		IP20				
Lifting & Movement	1 Person Lift		1 Person Lift		1 Person Lift				
Physical Dimensions									
	Value	Unit	IT Compliance	Value	Unit	IT Compliance	Value	Unit	IT Compliance
Depth	250	mm		250	mm		250	mm	
Width	290/490	mm	19" IT Rack Compatible	410/490	mm	19" IT Rack Compatible	450/490	mm	19" IT Rack Compatible
Height	132	mm	3u	132	mm	3u	132	mm	3u
Total Weight	3.5	KG		5	KG		7.5	KG	
Suitability	For environmental testing at rack level, where a higher delta-t is acceptable e.g. power testing			For environmental testing at rack level, where a delta-t close to that of the IT equipment is required.			For environmental testing at rack level, where a delta-t close to that of the IT equipment is required.		