

## Thermal Map Sensor (THMS-V2 / CTHMS-V2)

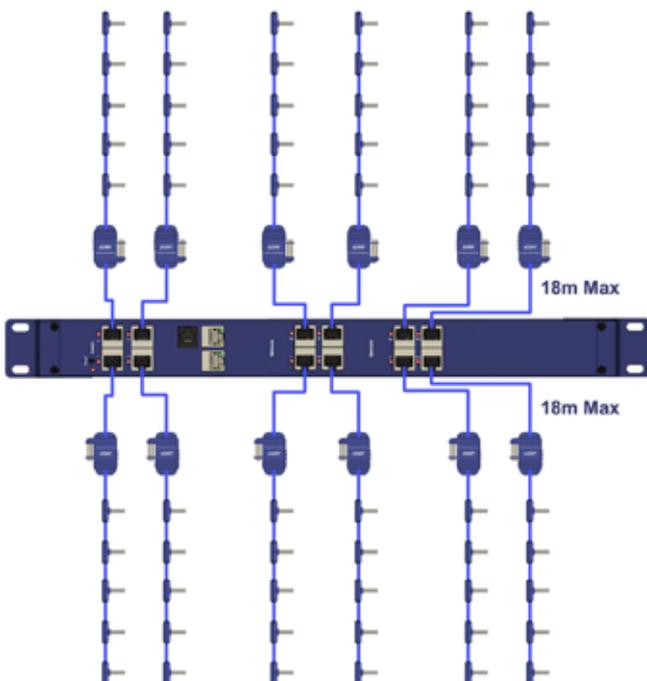


Pre-wired for easy installation on your cabinet. Placed at the top, middle and bottom - front and rear of the cabinet. This configuration of sensors gives monitoring of the air intake and exhaust temperatures of your cabinet, and the temperature differential from the front to the rear.

### Monitor temperature differentials in your cabinet

An interface box allows you to plugin a single string (THMS) or two strings (CTHMS). When a single string is used only the front or rear, top middle and bottom temperature values are monitored. When two strings are used both front and rear, top middle and bottom are monitored and  $\Delta T$  values are calculated.

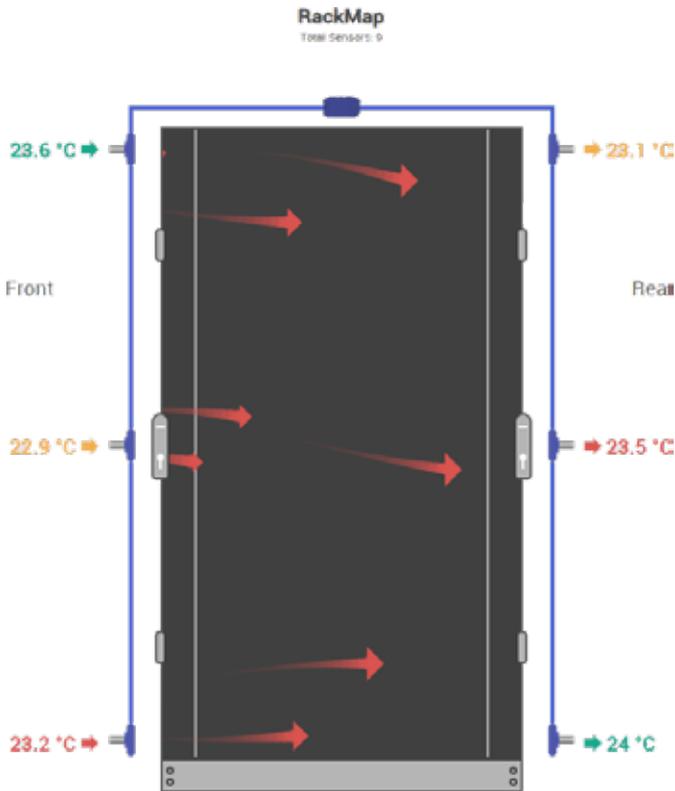
Thermal Map sensors are compatible with all sensorProbe+ base units. Sensors are provided with double sided VHB tape for mounting. Optional magnetic re-positionable mounting kit is available.



### Application Diagram

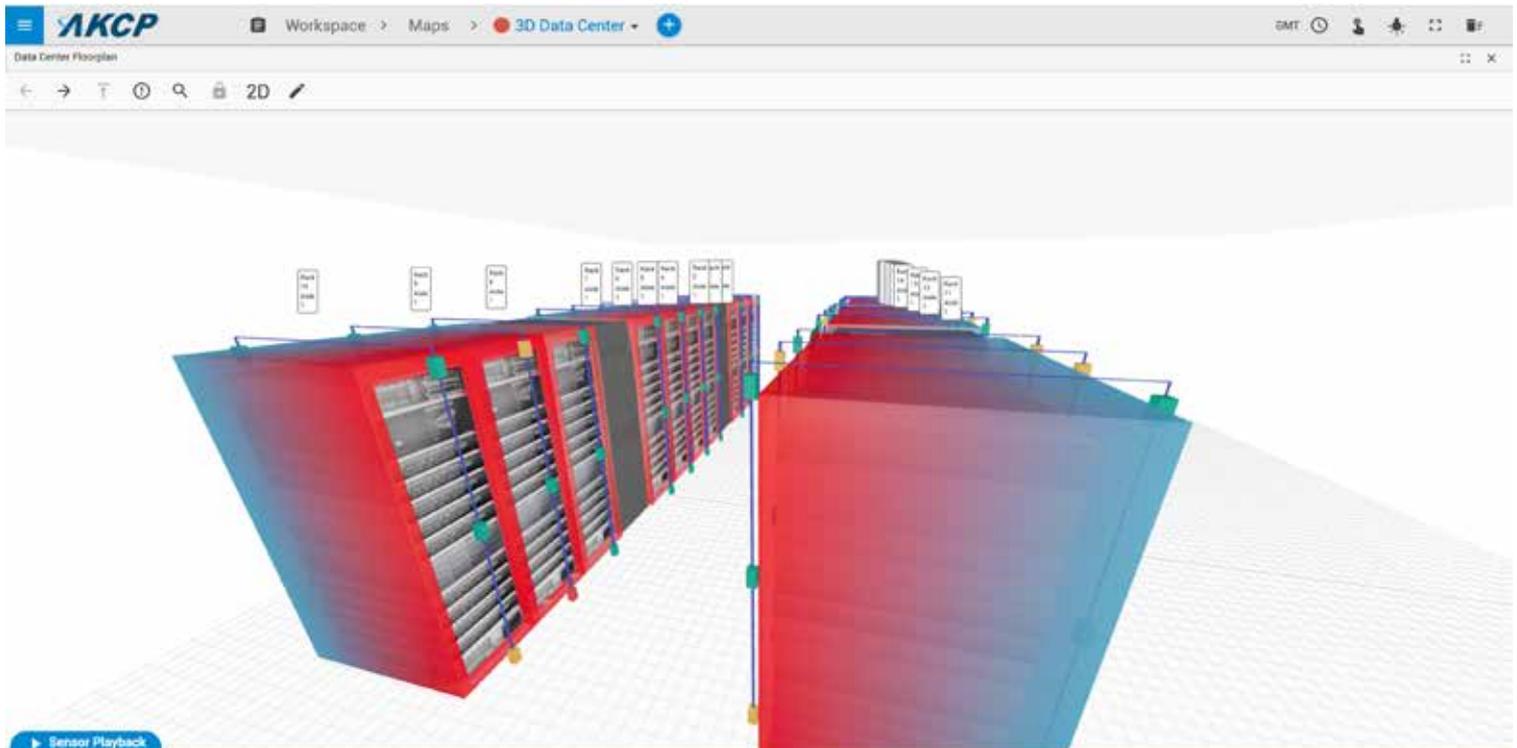
Thermal map sensors connect to any AKCP sensorProbe+ base units. Extendable up to a maximum of 18 meters cable length, you can monitor multiple cabinets from a single IP address. The maximum number of thermal maps on a single SPX+ is 16.

## THMS-V2 / CTHMS-V2



Thermal maps can be added to rack map views in AKCPro Server. Animated arrows show the temperature differential from the front to rear of the cabinet as well as the individual sensor values at the front, rear, top, middle and bottom of the cabinet. 3D heatmap visualization of your data center allows you to quickly identify hotspots or areas being over cooled.

Cabinet rack map displaying thermal maps in AKCPro Server

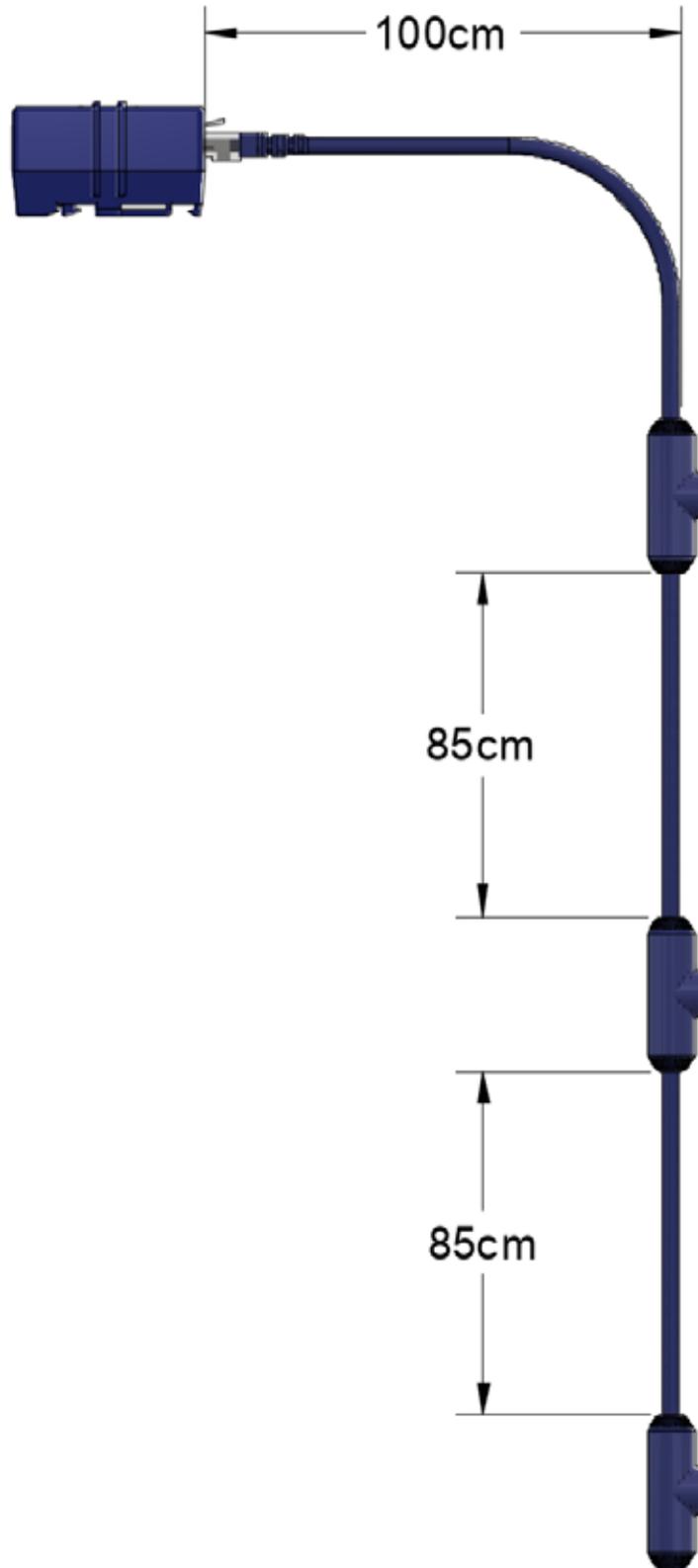


3D Heatmaps displayed in AKCPro Server

**THMS-V2 / CTHMS-V2 - Technical Specifications**

<b>Dual Temperature</b>	
<b>Measurement Range</b>	-40°C to +75°C -40°F to +167°F
<b>Measurement Resolution</b>	0.1°C increments 0.2°F increments
<b>Measurement Accuracy</b>	Maximum ±0.3 at -40°C, minimum ±0.3 at +25°C and ±0.3 at +75°C Maximum ±0.6 at -40°F, minimum ±0.6 at +25°C and ±0.6 at +167°F
<b>Dual Humidity</b>	
<b>Measurement range</b>	0 to 100% Relative humidity
<b>Resolution</b>	1%RH increments, 0.01%RH sensor reading
<b>Accuracy at</b>	25°C ±2%RH
<b>Single Temperature</b>	
<b>Measurement Range</b>	-40°C to +75°C -40°F to +167°F
<b>Measurement Resolution</b>	0.1°C increments 0.2°F increments
<b>Measurement Accuracy</b>	±0.5°C accuracy from -10°C to +75°C ±0.9°F accuracy from +14°F to +167°F
<b>Interface</b>	
<b>Communications cable</b>	RJ-45 jack to sensor using UTP CAT5e/6 cable
<b>Power source</b>	Powered by the sensorProbe+ family units. No additional power needed
<b>Power Consumption</b>	Typical 75 mWatt, 15 mA
<b>Maximum Cable Length</b>	Sensor can be extended from the RJ-45 Intelligent Sensor ports on the base units up to 60 feet, or 18 meters using standard CAT5/6 LAN cable
	sensorProbe+ units auto detects the presence of the Cabinet Thermal Map Sensor
<b>Dimension</b>	75 x 55 x 27 mm
<b>Mounting</b>	VHB Tape, Magnetic (optional)
<b>Components</b>	Manufactured using highly integrated, low power surface mount technology to ensure long term reliability.
<b>Operating Environment</b>	Temperature : Min. -35° C – Max.80° C Humidity: Min. 20% – Max. 80% (Non-Condensing)
<b>Sensor count</b>	THMS-V2 : 4 CTHMS-V2 : 11

**THMS-V2 - Technical Drawing**



## CTHMS-V2 - Technical Drawing

### Cabinet Thermal Map Sensor string

