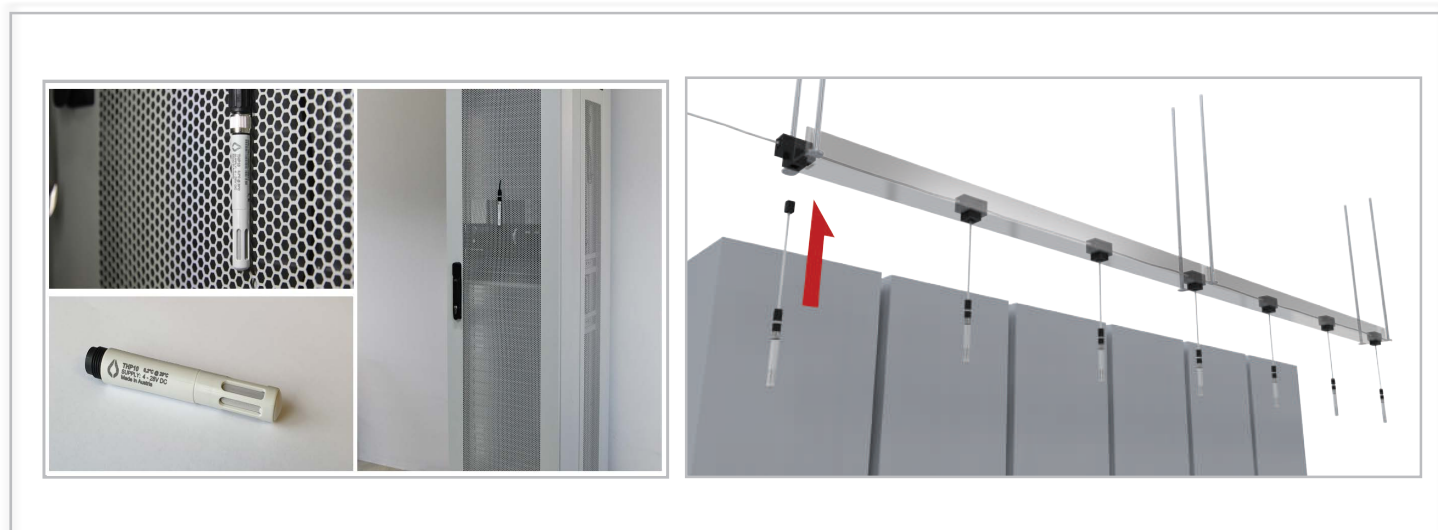
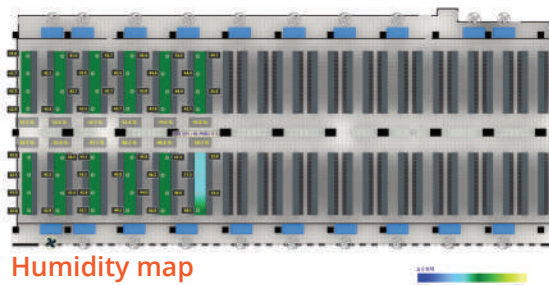
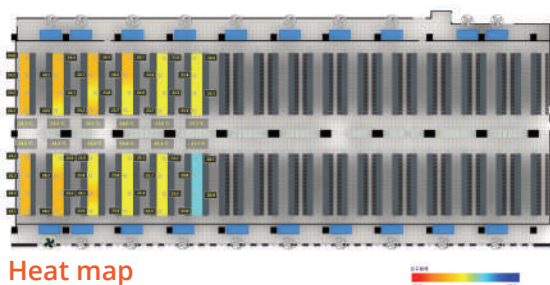


# THP10 Sensor

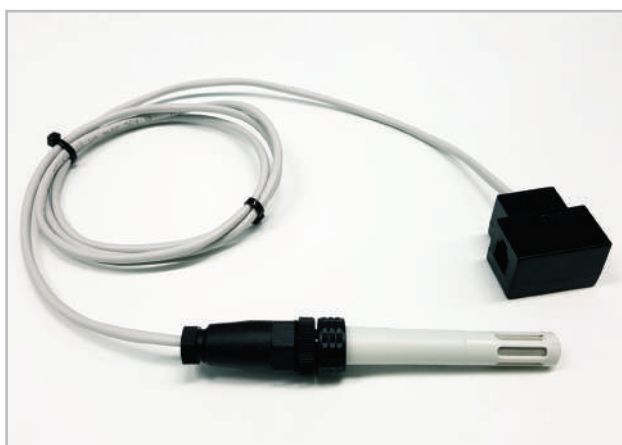
Smart Temperature / Relative Humidity Sensor



- Highest accuracy temperature and humidity
- Monitor the data center environment & measure the surrounding temperature & humidity
- Up to 32 sensors connected in daisy-chain
- Maximum cable length in 100 meter
- Support Modbus RTU protocol
- Seamlessly integrates into our MK119 Real-Time Environmental Monitoring System

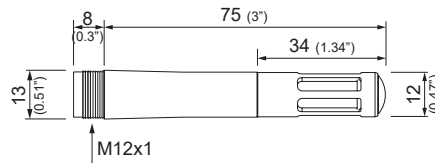


## THP10 Components

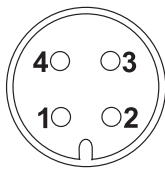


## DIMENSIONS & CONNETION DIAGRAM

polycarbonate housing - **REM-THP10**

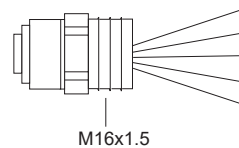


THP10 :



- 1...+UB
- 2...B-RS485 (= Data-)
- 3...A-RS485 (= Data+)
- 4...GND

M12x1 flange :



- brown...+UB
- white....B-RS485 (= Data-)
- blue.....A-RS485 (= Data+)
- black....GND
- grey.....shielding

### Specifications

Supply voltage	4 - 28V DC
Current consumption	typ. 0.4mA at a measuring rate of 1 sec.
Current pulse during power-up (with serial resistance 100 ohm)	at UB 7V : I <sub>max</sub> 60mA ; current draw drops below 10mA within 350µs at UB 7V : I <sub>max</sub> 110mA ; current draw drops below 10mA within 400µs
Warmup time after Power-up	max. 800ms
Interface / Bus	RS485 / Modbus in slave mode
Housing / Protection class	polycarbonate IP65
Electromagnetic compatibility	EN613226-1                      EN61326-2-3 Industrial environment FCC Part 15 Class B            ICES-003 Issue 5 Class B <b>CE</b>
Working and storage temperature	-40...80°C (-40...176°F)
Max. cable length	100m ( 328.1 ft )

### Relative Humidity

Modbus output range	0.00...100.00% RH
Accuracy incl. hysteresis and nonlinearity	±2% RH (0...90% RH)    ±3% RH (90...100% RH)
Temperature dependence	< (0.025 + 0.0003 x RH) [% rH/°C]

### Temperature

Sensor	Pt1000
Modbus output range	-40.00...+80.00°C (-40...176°F)

Accuracy

