

# TRH-554-WP

## Temperature & Humidity Transmitter



### Features

- Highly accurate Digital technology sensor gives fast and reliable output.
- Temperature range is -20 to 60°C with accuracy of  $\pm 0.5$  °C.
- Relative Humidity range is 0 to 100%RH with accuracy of  $\pm 2$ %RH.
- Long term stable output for both Temperature and Relative Humidity.
- Digital Display of Temperature & Relative Humidity on Seven Segment Display
- Standard 4-20mA signal outputs with configurable range.
- Easy handling & programming with 3 keys
- Password protected programming with password changing facility.
- Software calibration for both Temperature & Relative Humidity.
- Flash memory for data security in the event of power failure
- Optional 2 nos. Alarm relay contacts with two configurable Alarm levels & one relay for fail safe relay.
- Optional Isolated RS-485 communication port with MODBUS RTU Protocol.
- Compact size, can be easily installed

### Applications

- Clean Rooms
- Server Room
- Pharmaceutical
- Hospitals / Labs
- Walk-in-cooler
- Greenhouse Breeding
- Warehouse / Cold Room
- Indoor Air Quality (IAQ)
- Air Condition Room
- Energy Management System (EMS)

# TECHNICAL SPECIFICATIONS

## General

Sensor Type	: Capacitive Polymer sensor
Range	: For Temperature : -20 to 60°C For Relative Humidity : 0 to 100% RH
Display	: 2-Line, 4-Digit 13mm (H) Seven Segment Display. 8 LEDs to indicate status of instrument.
Control Action	: i) Two independent Alarm set points with Latch & Non-latch facility. : ii) User selectable Hysteresis
Setting	: By 3 Keys on front panel for WP model

## Performance

Measurement	: ± 0.5°C for Temperature
Accuracy	: ± 2% RH for Relative Humidity
Response Time	: Approx 5 Seconds

## Electrical

Supply Voltage	: 18 to 36 VDC; Typically 24VDC.
Power Consumption	: Less than 3.5 Watts
Cable	: 3 Wires (1.5 mm <sup>2</sup> ) Flexible or Armoured Shielded Cable.

## Error Monitoring

- During Sensor break / open, the Display shows 'SEnS OPEn' & output current will be as per Upscale/Downscale.
- During Over Range the Display Shows 'OVER' & Under range Display Shows 'UNDER' output current will be as per Upscale / Downscale
- Upscale current = 21mA
- Down scale current = 3.7mA

## Output Signal

Standard	: Two 4-20mA Current Outputs with configurable range selection, one each for Temperature & Relative Humidity Respectively
Optional	: Three SPDT Relays (one for failsafe and two for Alarm Condition) of rating "120VAC/2A, 24VDC/2A"
Optional	: Isolated RS-485 Communication port with MODBUS RTU protocol.

## Environmental

Operating Temperature	: -15 to +55°C
Humidity	: Less than 95% Non-Condensing.

## Accessories

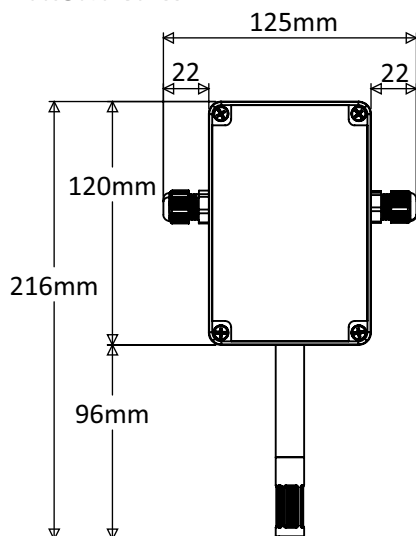
- CE certified 24 VDC Power supply.
- Canopy Mounting stand.
- SCADA Software.
- RS-485 to USB converter
- RS-232 to RS-485 converter
- Hooter cum Flasher

## Weatherproof Housing

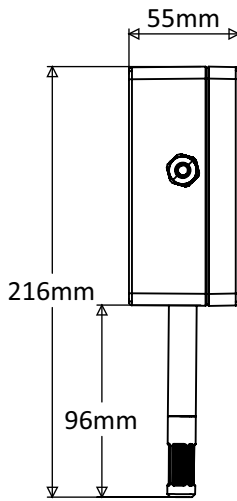
Protection Class	: IP-65
Cabinet Material	: Polycarbonate, grey colour
Cable Entry	: Thermoplastic cable gland (IP 68)
Dimension	: 216 mm (H) x 103 mm (W) x 55 mm (D) (with 1 gland) 215 mm (H) x 125 mm (W) x 55 mm (D) (with 2 glands)
Mounting	: Wall Mounting / Stand Mounting/Duct Mounting
Weight	: Approx 370 Grams.

## WEATHERPROOF ENCLOSURE DIMENSIONS

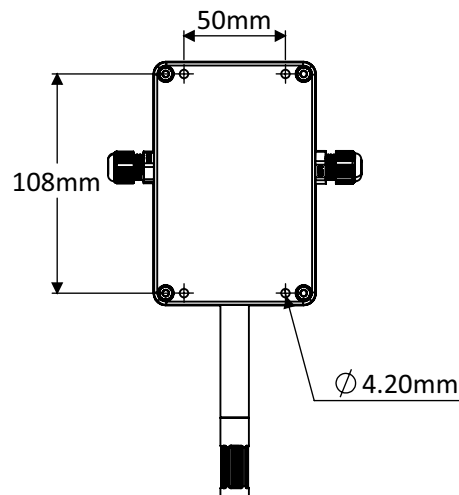
FRONT VIEW



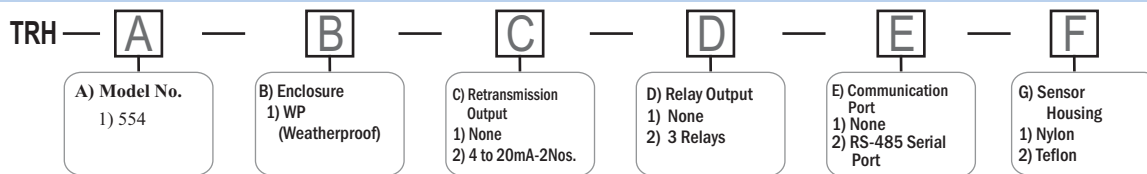
SIDE VIEW



BACK VIEW



## ORDERING INFORMATION



\* Before placing order please Refer the above ordering information or Contact us for assistance.

Manufactured by :



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