

**Models:**

ITW5201: Standard Model

**ITW52****Wall Mounted Temperature  
Detector with Display****Specifications****Detector Section****Operating Voltage:**

12VDC to 30VDC (35VDC Max).

**Operating Mode:**

Two wire current loop.

**Calibration:**

Within  $\pm 0.25^{\circ}\text{C}$  of reference at  $24^{\circ}\text{C}$ .

**Display Section****Power Supply**

**Voltage:** 24VAC  $\pm 10\%$  @ 50/60Hz or 24VDC  $\pm 10\%$ .

**Power Consumption:** 2VA max.

The transformers used must be safety transformers in compliance with EN 60472 and be designed for 100% duty. The operating voltage must meet the requirements of safety extra low voltage (SELV) to EN 60730. The transformer must be sized and fused in compliance with local safety regulations.

**Inputs:**

-2.5VDC to 11VDC max.

**Display Resolution:**

**Range:** -25.0 to 110.0

**Resolution:** 0.1

**Scaling:** Volts x10

**Display Type:**

Green, 4 Digit, 7 Segment LED.

**Display Terminal Identification:**

8 -2.5VDC to 11VDC input.

9 Common to 0VAC Supply.

10 24VAC Supply.

**Temperature Ratings:**

**Storage:** 0-50°C non-condensing


**Operating:** 0-40°C non-condensing

**Enclosure:** Manufactured from an ignition resistant grade of ABS which meets the requirements of AS2420.

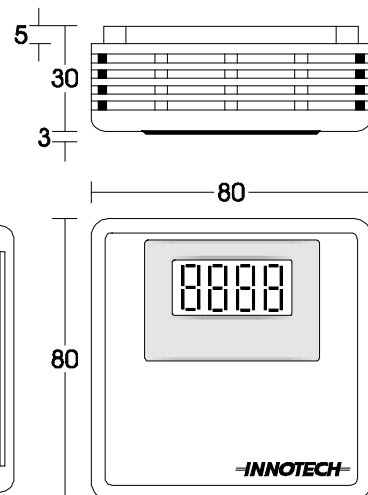
**Colour:** Off White

**Installation**

1. Mount display in a dry and reasonably clean location free of vibration by fixing the base to the wall with four screws through the holes provided in the base of the case.

 Ensure the word "UP" is to the top.

2. Wire in accordance with INNOTECH connection diagrams and local bylaws or refer to your local distributor.
3. Fit the cover by placing the top edge of the cover over the bottom tabs on the top of the base and then pressing the bottom middle of the cover to the wall. A firm 'click' indicates that the cover is securely fixed.

**Application**

The INNOTECH ITW5201 wall mounted current loop temperature detector with digital display is designed for use with the INNOTECH ITC, IPC, IMC and IDC range of temperature controllers and to accept a DC voltage input. Its can display values as either a temperature display with a "°C" symbol or as a numeric display with no symbol.

**Features:****Detector:**

- Detectors are interchangeable
- Not polarity conscious
- Individually factory calibrated
- Linear over full operating temperature range
- Current loop operation eliminates problems associated with voltage drop in connecting cables

**Display:**

- Easily read 10mm high digits
- High input impedance minimises source loading
- Field selectable operating mode (numeric/°C)

**Enclosure:**

- Attractively styled low profile case blends with any decor
- Cover secured by positive locking clips
- No unsightly screws

**Approvals**

The ITW5201 conforms to the requirements per European Consortium standards EN55011:1991 (CISR11) Class B, Group 1 and Australian/New Zealand standard AS/NZS 2064:1997 for RCM labelling.

## Detector Wiring

For most installations twisted pair cable will be adequate for the detector wiring provided that it is not run in the same conduit as the power cables.

Shielded cable should be used where there are high levels of EMI (electro-magnetic interference). The shield should remain continuous from the detector to terminal 9 of the controller.

## Display Wiring

1. Earth one side of the 24VAC at the transformer.
2. Connect the **earthed** side of the 24VAC to terminal 9.
3. **DO NOT** connect 24VAC to terminal 8.
4. Shielded cable should be used to minimise EMI (electro-magnetic interference). The shield should remain continuous from the display to the signal source. Do not connect the shield to the source being measured. (See diagram)

## Calibration:

The digital display in the ITW52 can be calibrated via a small screwdriver adjustment in the rear of the display.

**USE EXTREME CARE WHEN MAKING THIS ADJUSTMENT AS THE DISPLAY COMPONENTS ARE MINIATURE AND THEREFORE FRAGILE.**

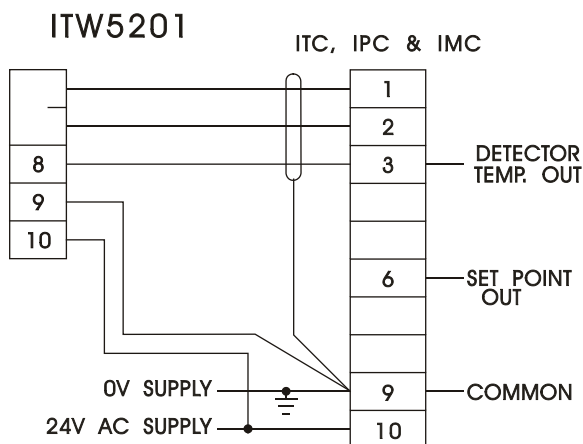
1. Remove any wires from terminal 7.
2. Short terminals 7 & 8 together.
3. Adjust 'Zero' pot with screwdriver until the meter reads 0.00.
4. Apply a DC voltage to input terminal 7.
5. Measure the voltage with a multimeter and adjust the 'span' pot with a screwdriver until the reading on the display agrees with the multimeter.

## Removing the Cover

Grip the bottom of the sides of the cover and then lift the cover off the wall. It will come free of the base with a minimum of force.

**DO NOT** grip the cover by the middle of the sides. This will cause the cover to grip more firmly to the base.

## STANDARD CONNECTION



Screened cable should be used to reduce EMI.

## DISPLAY CONNECTION OPTIONS

### DISPLAY DETECTOR TEMPERATURE OUT



### DISPLAY SET POINT OUT



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