

# TRACKER 290

## Large Digit Process Displays



- Wall or ceiling mounting
- Five digit, three-colour display
- Remote measurement technology
- Rugged steel enclosure (stainless option)
- Isolated analogue retransmission output option
- 2.25" (57mm) or 4" (101mm) high display options
- Four alarm relay outputs option
- User linearisation for tank contents display applications
- Two wire transmitter / strain gauge transducer power supplies
- Universal input for mA, thermocouple, PRT, voltage and millivolt
- Scaling to engineering units, °C, °F or Kelvin, for temperature sensors

Unlike conventional large process displays, the sensor input, transducer supplies, optional alarm relays and analogue outputs are all in the remote measurement module allowing easier installation and shorter sensor cable lengths. Only AC power and a two-core communication cable need to be wired to the display. The remote measurement module, which can be mounted on a standard T35 DIN rail locally to the point of measurement, can be up to 1.2 km from the display.



Any field changes can be made at the remote module using a standard PC. No longer are you required to use special configuration devices, often while standing on a ladder.

No confusing menus. An easy to use PC-compatible configuration programme and cable are supplied.



### Three-colour Display as Standard

The display colour is controlled by alarm setpoints configured in the remote measurement module. This allows green, orange or red displays dependent on the measurement value. The display can be set to any one or two colours.



### Quad Alarm Relay Option

Powered and controlled by the remote measurement module, this option gives four, isolated volt-free change over contacts for the alert and control applications.

The alarm relay option is mounted next to the remote measurement module. Alarms can be high, low or deviation, with alarm delay and hysteresis features.

## Specification

### Display:

Five digits, three-colour high intensity LED.  
2.25" (57mm) or 4" (101mm) high.  
Wall, panel or suspended mounting, steel enclosure.  
IP54 Protection (IP65 stainless steel options).

### Measurement Input:

Type: Sigma Delta, Resolution: 20 Bit plus sign.  
Drift with temperature: <100ppm/°C.  
Update rate: 7.5/sec.  
Common/series mode rejection: >150dB/<70dB (50 & 60Hz).

### Thermosensors:

Type J, K, T, B, R, S and N thermocouples, linearised.  
PT100 3 wire resistance thermometer, linearised.  
Typical accuracy: base metal ±0.5°C, rare metal ±1.2°C, RTD ±0.3°C.  
Engineering units: °C, °F or Kelvin.

### Process Signals:

Ranges (Impedance): ±100mV (1000MΩ), ±10VDC (1MΩ), ±20mA (<5Ω).  
Resistance: 0–400, 0–4000 Ohms and potentiometers.  
Accuracy: 0.02% typical, user scaling to any engineering units.  
18 Point user linearisation, square root, S.G. correction.

### Sensor Excitation Supply Outputs:

24VDC (nom) two wire transmitter supply (35mA).  
10VDC regulated bridge supply (35mA).

Full specification available on request. Other logic configurations available.

### Environmental:

Temperature: 0–60°C operating, -10 to 70°C storage.  
Humidity: 10–95% RH non-condensing.  
Remote measurement module T35 DIN rail mounting.

### Measurement Input:

Safety: EN61010, Susceptibility: EN50082-2, Emissions: EN500081-1.  
CE certified 2004.

### Optional Outputs:

**Analogue output:** 0–20, 4–20mA or 0–10V, user scaling (15 Bit).  
Maximum load (mA): 1000 Ohms, isolation to 500VDC / peak AC.

**Alarm relay outputs:** 4× volt-free change over contacts.

Rating: 1A @ 250VAC, 5A @ 30VDC.

Types: high, low, deviation (band), on delay time, off delay time, hysteresis, output selection (one alarm can switch more than one output).  
Outputs energised or de-energised when in the alarm state.

### Ordering Code

2	9	H					
Model Number	Power	Alarm Relays	Analogue output	Enclosure	Mounting		
Digits height (H):	2 = 2.25" (57mm), 4 = 4" (101mm)						
Power:	1 = 230VAC, 2 = 115VAC						
Four alarm relays:	N = Not fitted, R = Fitted						
Analogue output:	N = Not fitted, A = Fitted						
Enclosure:	N = Mild steel, S = Stainless steel (IP65)						
Mounting:	N = None, E = Eye bolts (ceiling suspended), W = Wall mounting brackets, S = Side brackets (wall mounted - angled)						

**Example:** 294 – 1 – R – A – S – E

5 Digit, 4" high display, 230VAC with analogue output, four alarm relays, stainless steel enclosure and eye bolts.

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