

Tracker 220

A Complete Range of Universal Input Digital Panel Meters for Temperature and Process Measurement from: **£140.00**



Benefits:

- Universal Input
- Analogue Output
- Digital Status Inputs
- Transmitter & Transducer Supplies
- 4 Alarm Set-points
- Wide Ranging Power Input
- IP65 Front Panel
- Standard 1/8 DIN Size
- Red or Green LED Display
- Programmable Function Buttons
- Maths Functions
- Serial Communications

Universal Input

You can directly connect any of the Tracker 220 series of digital panel meters to most process sensors including thermocouples, RTDs, 20mA, 100mV and 10VDC signals. All the thermosensor ranges have built-in linearisation and automatic or external cold junction compensation. The panel meter display can show °C, °F or Kelvin (Absolute), with the decimal point position being user-adjustable to give the required measurement resolution or switched to automatic (Auto-ranging Mode). You can select the sensor break detection on the panel meter to produce upscale or downscale readings. Process inputs can be scaled to any engineering unit and can be linear, mapped to one of the thermosensor linearisation curves or be user linearised using the 24-point user programmable linearisation feature.

Sensor Excitation

All Tracker 220 digital panel meters are fitted with a fixed 24 volt DC output that is electrically isolated; you are able to use this to power a single 20mA 2-wire transmitter. In addition, the Tracker 221 and 222 panel meters have a 10V regulated supply and the Tracker 223 and 224 panel meters are fitted with a programmable 0-12 volt DC regulated output. Data Track designed both the fixed 10V and programmable 0-12V DC supply outputs to power strain gauge-type sensors including load cells.

Connectivity

Digital status inputs, serial communications, analogue output, transmitter supply, alarm relays and transducer supply, are all available. You can remove the digital panel meter for routine servicing without disturbing these connections.

Analogue Output

The Tracker 223 and 224 digital panel meters are fitted with an electrically isolated analogue output which you can configure as 0-10 volt, 0-20mA or 4-20mA and scale over any portion of the display range. For example, it's possible to retransmit a type K thermocouple as a linear 4-20 mA signal equivalent to 0-1000°C to another device such as a chart recorder or data logger. The output is linear to temperature

(display value). The analogue output can be set to transmit the measured (PV) value or the maximum, minimum or the averaged value and has its own damping filter for noisy or fast moving signals. Alternatively it's possible to control the analogue output of the panel meter via the serial communication interface.

User Linearisation

Some applications require a special linearisation curve to be defined by the user. A typical example is tank contents measurement where you can measure the level of a liquid but this is not linear to volume (e.g. litres). User linearisation allows you to define up to 24 calibration points. You can enter each point manually or, for greater accuracy, read directly from the sensor output, thus removing measurement errors. The Tracker 220 panel meter allows you to enter up to 24 linearisation points in any order. The Tracker 220 panel meter will use the stored values to define the required linearisation curve.

Alarms

Each of the Tracker 220 series of panel meters has 4 software alarms. You can configure these for alarm type, setpoint, on/off delay and on/off hysteresis value. Alarms can be individually set to be latching or non-latching and to flash a message on the front panel display when active. Any of the 4 software alarms can operate a relay (222 and 224 digital panel meters only). In addition, a special AND function allows a relay to switch only if 2 or more alarm conditions are active. You can set the relays to be energised or de-energised in the alarm condition.

Front Panel Control

Full setup is available using the front panel buttons to step through a simple password protected menu. You can make some functions, such as alarm setpoints, directly available to an operator. Alternatively, we can supply the panel meters without front panel buttons.

User Definable Buttons

Two of the front panel buttons can be user programmed to provide one or more special functions such as tare and zero.

Serial Communications

Both 223 and 224 digital panel meters are fitted with an electrically-isolated 2 or 4-wire RS 422/485 serial interface. The 221 and 222 panel meters are fitted with RS485 2-wire communications. All measured values and setup parameters are accessible, however, it is possible for you to set the panel meters to be read only, thus protecting their configuration. Four communication protocols are available. These include MODBUS RTU and our simple ASCII based DTPI protocol, which has been designed to be easier to implement. The display, analogue output and relay outputs can all be set or configured via the serial interface.

Universal Power Input

Wide-ranging 90-265V AC input allows world-wide installation. Low voltage AC/DC input version is also available.

Display

The flat recessed display, together with high brightness red or green LEDs ensure maximum visibility of the digital panel meter, even in difficult ambient lighting conditions.