Temperature transmitters are used for a variety of reasons. The use of temperature transmitters can eliminate the need for long costly runs of thermocouple wire with less expensive copper signal wire. When the environment is electrically noisy, sending a 4-20 mA signal to the control panel reduces the chance of error.

The Tempco ETR Series of 2-wire transmitters is offered in isolated, non-isolated and high precision isolated versions. They are designed to fit directly on a standard 35 mm DIN rail.

**Design Features:**
- Three levels of accuracy: ETR1—±0.15% of span
  ETR2—±0.10% of span
  ETR3—±0.05% of span
- Accepts 11 thermocouple types and 3- or 4-wire RTD sensors
- Field programmable with easy to use Windows®-based configuration software and a PC
- Sensor break monitoring, programmable for upscale or downscale
- Full access to all features while in operation
- Temperature linear output
- NAMUR-compliant
- Configuration, editing & reading without external power
- Easy wiring with captive clamp style wire connections

**Additional Design Features for the Isolated Versions**
- Fully universal, linearized and isolated 3/4 wire RTD, T/C, mV and Ohm
- Sensor and system error correction
- Low sensor isolation detection
- Simplified loop check up with calibration output

The ETR Transmitters are built using surface mount components and employ digital technology with non-volatile memory to retain the configuration after programming and the cable is removed.

### Ordering Code:

<table>
<thead>
<tr>
<th>Box 1</th>
<th>Box 2</th>
<th>Box 3</th>
<th>Box 4</th>
<th>Box 5</th>
<th>Box 6</th>
</tr>
</thead>
</table>
| Isolation
  1 = Non-Isolated
  2 = Isolated
  3 = Isolated, High Precision
| Input Signal
  R = RTD-Pt100
  S = RTD-D100
  H = RTD-Pt100
  T = Thermocouple
  M = mV (ETM2 & ETR3 only)
  P = Potentiometer (ETR2 & ETR3 only)
| thermocouple input.
  J = J thermocouple
  K = K thermocouple
  E = E thermocouple
  B = B thermocouple
  C = C thermocouple
  L = L thermocouple
  N = N thermocouple
  R = R thermocouple
  S = S thermocouple
  T = T thermocouple
  U = U thermocouple
| Minimum Range
  In degrees (°C and RTD)
  mV & ohms (isolated only)
  Backfill unused boxes with 0’s
  Example: 10° = 0010
| Maximum Range
  In degrees (°C and RTD)
  mV & ohms (isolated only)
  Backfill unused boxes with 0’s
  Example: 950° = 0950
| Units:
  F = °F
  C = °C
  M = mV Ohms (isolated only)
  R = Ohms (isolated only)