

Rosemount 3144P Temperature Transmitter

Compact technical summary based on Emerson's public product page and Product Data Sheet 00813-0100-4021, Rev TH, February 2026.



Product overview

The Rosemount 3144P is a configurable, two-wire field-mount temperature transmitter for critical process measurement. It accepts single or dual RTD, thermocouple, millivolt and resistance inputs and provides either 4-20 mA/HART or FOUNDATION Fieldbus output. Dual-input configurations can support Hot Backup, sensor drift monitoring and differential or average temperature functions. Exact capabilities depend on the complete order code.

Series	Rosemount 3144P	Product type	Field-mount temperature transmitter
Manufacturer	Emerson Automation Solutions / Rosemount	Order status	Series only - complete model code required
Typical industries	Oil and gas, refining, power, chemicals, water and general process industries	Mounting	Direct sensor mount or remote bracket mount

Key technical specifications

Parameter	Specification
Input capability	Single or dual sensor; 2-, 3- or 4-wire RTDs; thermocouples; -10 to 100 mV; 0 to 2000 ohm
Output options	Two-wire 4-20 mA with HART Revision 5 or 7; or FOUNDATION Fieldbus, ITK 6.0.1
Pt100 input range	-200 to +850 °C for IEC Pt100 ($\alpha = 0.00385$)
Pt100 reference accuracy	± 0.10 °C digital; enhanced accuracy option ± 0.08 °C; HART D/A accuracy $\pm 0.02\%$ of span
Input/output isolation	500 Vdc (500 Vrms, 707 V peak) at 50/60 Hz
HART power	12.0 to 42.4 Vdc at transmitter terminals; 18.1 Vdc required with a 250-ohm load
Fieldbus power	9.0 to 32.0 Vdc, 12 mA maximum
Update time	Approximately 0.5 s for one sensor and 1 s for dual sensors
Operating ambient	-40 to +85 °C, with or without LCD; display response may slow below -20 °C
Humidity	0 to 99% relative humidity, non-condensing
Enclosure	Dual compartment; low-copper aluminum or CF-8M cast 316 stainless steel
Ingress protection	Type 4X, IP66 and IP68, subject to correct installation and approval configuration
Weight	Aluminum housing 1.4 kg; stainless-steel housing 3.5 kg
Conduit entries	Standard 1/2-14 NPT; PG13.5, M20 x 1.5 and JIS G 1/2 adapters available
Diagnostics	Hot Backup, sensor drift alert, thermocouple degradation, min/max tracking and device diagnostics; option-dependent
Functional safety	Eligible HART configurations are IEC 61508 certified for SIL 2 single use and SIL 3 redundant use
Rosemount X-well	Optional non-intrusive process temperature solution; requires compatible factory-supplied sensor assembly and HART 7

Quotation and verification checklist

3144P is a product-family designation, not a complete finished-goods order number. Before quotation, confirm the complete model code, nameplate, number and type of sensors, wiring, calibrated range, engineering units, HART or Fieldbus output, HART revision, power supply, housing material, conduit entry, display, mounting, ambient conditions, diagnostics, hazardous-area approvals, SIL requirement, calibration certificate and country of manufacture. Do not infer all optional features from the series name or a representative product image.

Official sources

Product page:

<https://www.emerson.com/en/measurement-instrumentation/products/rosemount-3144p-temperature-transmitter-family>

Product Data Sheet:

<https://www.emerson.com/documents/automation/product-data-sheet-rosemount-3144p-temperature-transmitter-en-73128.pdf>

Note: This compact summary is prepared for product-data entry and quotation screening. It does not replace the official Emerson Product Data Sheet, installation instructions, safety documentation or the supplied device nameplate.