

# 7600D temperature transmitter



## Overview

The 7600D is a highly accurate, PC programmable, microprocessor based temperature transmitter. It accepts a wide range of inputs - RTDs, thermocouples, resistance and millivolt - loop-powered and provides a 4-20mA output signal. Configure the 7600D with a PC and our software. The slim DIN rail design allows for many transmitters to be mounted in a small area.

## Key features

- Low cost
- 0.08% accuracy
- Full input-output isolation
- Custom input/linearization capability
- Configurable via a PC or HART Communicator
- T/C Inputs: B, C, D, R, S, E, J, K, L, N, T, U
- RTD inputs: Pt100, Pt500, Pt1000, Ni100, Ni500, Ni1000
- mV Inputs: -10 to 75mV
- Ohm Inputs: 10 to 2000 ohms
- Outputs: 2-wire, 4-20mA or 20-4mA with optional HART signal superimposed

# Technical specification

Feature	Description
Input range	Standard Pt100, selectable range -328 to 1562F (-200 to 850C), minimum span 18F (10C), options, various RTD, TC inputs accepted
Output	Standard 4-20mA, with option of 20 to 4mA
Zero and span adjustments	Using software provided, it can be set anywhere within sensor range. Zero and Span are non interacting.
Failsafe	Standard upscale, with downscale option
Response time	1 second
Damping	User settable from 0 to 8 seconds
Isolation	3750 VAC, input to output
Power supply	8 to 35VDC
Load resistance	$R_{Max} (ohms) = (V_{Supply} - 8VDC) / .025A$
Accuracy	For Pt100: .36F (0.2C) or 0.08% of span, whichever greater
Long term stability	+/-0.05% of calibrated span per year
Cold junction compensation	+/-1C (measured with Pt100 IEC 751, Class B)
Temperature limit	-40F to 185F (-40C to 85C)
EMI/RFI effect	Conforms to EU Directives (CE Mark). Meets IEC 61326 amend 1, 1998 and NAMUR NE21.
Approvals	Optional Factory Mutual (FM), CSA and Intrinsically Safe (IS)
Accessories	Software and USB interface programming cable

## About Ultra Energy

Organizations working with nuclear and industrial technologies must deliver reliable production at the same time as safeguarding people, the environment and infrastructure. We develop and manufacture measurement and control solutions that give our customers complete, long-term control over systems operating in harsh environments, helping them operate safely and increasing the value derived from their investments over their total lifespan.

Part of Curtiss-Wright, Ultra Energy has worked with nuclear and industrial customers for over 60 years. We support customers across the world from facilities located in the US and UK. Our solutions are embedded in strategic national infrastructure and our people are active partners in customer programs that are focused on delivering advanced future nuclear and industrial capabilities.

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