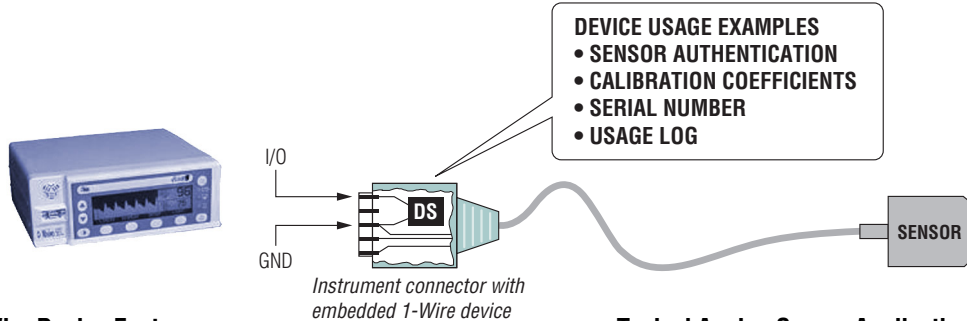


# INDUSTRY'S MOST EFFICIENT SOLUTION FOR EMBEDDING CALIBRATION DATA WITH ANALOG SENSORS

## 1-Wire Interface Reduces Calibration Memory Device Interconnect to Only Two Contacts

Embed calibration data in the sensor. That is the most expeditious way to achieve high-accuracy measurements with replaceable or disposable analog sensors. When the sensor is attached to the measuring instrument, the data is automatically read and used by the instrument's signal processing software/hardware. Since 1-Wire® EEPROM and EPROM devices require only two contacts for the connection, they provide the most efficient solution to these sensor calibration challenges.



### Common 1-Wire Device Features:

- ◆ Only Two Contacts Required for Device Operation
- ◆ Operating Power Derived Entirely from the 1-Wire Line
- ◆ Exceptional ESD Performance—DS2430A: IEC 1000-4-2 Level 4
- ◆ Designed for Hot/Live System Insertion
- ◆ Wide Operating Range: 2.8V to 5.25V, -40°C to +85°C
- ◆ Each Part Uniquely Identified by a Factory-Lasered 64-Bit ROM ID

### Typical Analog Sensor Applications:

- ◆ Medical
- ◆ Temperature, Humidity, Pressure
- ◆ IEEE-P1451.4 Smart Sensors

## 1-Wire Devices Commonly Used for Analog Sensor Calibration

Part	Memory Type	Memory Size (Bit)	Additional Features	SMT Packages
DS2430A	EEPROM	256		6-TSOC, Flip Chip
DS2431*	EEPROM	1k		6-TSOC, Flip Chip
DS2432	EEPROM	1k	SHA-1 Security	6-TSOC, Flip Chip
DS2433	EEPROM	4k		8-SO, Flip Chip
DS250x	EPROM	1k, 16k, 64k		6-TSOC, 8-SO, CSP
DS2480B	N/A	N/A	Serial Line Driver	8-SO

1-Wire is a registered trademark of Dallas Semiconductor. \*Future product—contact factory for availability.



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