

## Technical Information

STT850 SmartLine Temperature  
Specification 34-TT-03-14**Introduction**

Part of the SmartLine® family of products, the STT850 is a high performance Temperature transmitter offering high accuracy and stability over a wide range of process and ambient temperatures. The SmartLine family is also fully tested and compliant with Experion® PKS providing the highest level of compatibility assurance and integration capabilities. SmartLine easily meets the most demanding needs for temperature measurement applications.

**Best in Class Features:****Industry leading performance**

- Digital Accuracy up to 0.08 Deg C for RTD\*
- Stability up to 0.01% of URL per year for ten years
- 125 mSec update time for single input models
- 250 mSec update time for dual input models
- Sensor Matching Facility for higher accuracy\*

**Reliable measurement**

- Built in Galvanic Isolation
- Differential/Averaging/Redundant/Split Range measurements
- Dual Compartment Housing
- Sensor Break detection
- Comprehensive on-board diagnostic capabilities
- Full compliance to SIL 2/3 requirements.
- Available with 15 year warranty
- Supports Namur 107\* Extended Diagnostics
- Supports Namur 89 Wire break

**Figure 1– Smartline STT850 Temperature transmitter****Lower Cost of Ownership**

- Universal input
- Dual sensor option
- Multiple local display capabilities
- Modular construction
- External zero, span, & configuration capability
- Polarity insensitive loop wiring
- Digital Output Option\*

**Communications/Output Options:**

- 4-20mA dc
- Honeywell Digitally Enhanced (DE)
- HART® (version 7.0)
- FOUNDATION™ Fieldbus\* compliant to ITK 6.1.1

All transmitters are available with the above listed communications protocols.

\*Check with the factory for availability

## Description

The SmartLine Temperature transmitter is designed and manufactured to deliver very high performance across varying ambient temperature. The total accuracy level of the transmitter including the ambient temperature effect in, harsh industrial environments, allows the STT850 to replace virtually any competitive transmitter available today.

## Unique Indication/Display Options

The STT 850 modular design accommodates a basic alphanumeric LCD display or a unique advanced graphics LCD display with many unparalleled features.

### Basic Alphanumeric LCD Display Features

- Modular (may be added or removed in the field)
- 0, 90, 180, & 270 degree position adjustments
- Deg C , F, R and Kelvin measurement units
- 2 Lines 16 Characters (4.13H x 1.83W mm)
- Up to 8 display screens with similar formats
- Configurable screen rotation timing (1 to 30 sec)
- Auto/Manual selection for screen rotation
- Displays up to 9 Datapoints - Loop PV,CJ Temperature, Sensor 1, Sensor 2, Sensor Delta, RTD 1 Resistance, RTD 2 Resistance, Loop output, Percent Loop.
- Out of Range Indication

### Advanced Graphics LCD Display Features

- Modular (may be added or removed in the field)
- 0, 90, 180, & 270 degree position adjustments
- Up to eight display screens with 3 formats are possible (Large PV with Bar Graph or PV with Trend Graph)
- Configurable screen rotation timing (1 to 30 sec)
- Sensor health Trend and warning\*
- Provides instant visibility for diagnostics
- Multiple language capability. (EN, GE, FR, IT, SP, RU, & TR)

\*Check with the factory for availability

## Configuration Tools

### Integral Three Button Configuration Option

Suitable for all electrical and environmental requirements, SmartLine offer the ability to configure the transmitter and display via three externally accessible buttons when either display option is selected. Zero/span capabilities are also optionally available via these buttons with or without selection of a display option.

### Hand Held Configuration

SmartLine transmitters feature two-way communication and configuration capability between the operator and the transmitter. This is accomplished via Honeywell's field-rated Multiple Communication Configuration.

The Honeywell Handheld MC Toolkit is capable of field configuring DE and HART Devices and can also be ordered for use in intrinsically safe environments.

All Honeywell transmitters are designed and tested for compliance with the offered communication protocols and are designed to operate with any properly validated hand held configuration device.

### Personal Computer Configuration

Honeywell's SCT 3000 Configuration Toolkit provides an easy way to configure Digitally Enhanced (DE) instruments using a personal computer as the configuration interface. Field Device Manager (FDM) Software and FDM Express are also available for managing HART & Fieldbus device configurations.

## Diagnostics

SmartLine transmitters all offer digitally accessible diagnostics which aid in providing advanced warning of possible failure events minimizing unplanned shutdowns, providing **lower overall operational costs**

## System Integration

- SmartLine communications protocols all meet the most current published standards for HART/DE/Fieldbus.
- Integration with Honeywell's Experion PKS offers the following unique advantages.
  - Transmitter messaging
  - Maintenance mode indication
  - Tamper reporting
  - FDM Plant Area Views with Health summaries
  - All STT 850 units are Experion tested to provide the highest level of compatibility assurance

## Modular Design

To help contain maintenance & inventory costs, all STT 850 transmitters are modular in design supporting the user's ability to replace Temperature boards, add indicators or change electronic modules without affecting overall performance or approval body certifications. Each Temperature board is uniquely characterized to provide in-tolerance performance over a wide range of application variations in temperature and due to the Honeywell advanced interface, electronic modules may be swapped with any electronics module without losing in-tolerance performance characteristics

### Modular Features

- Replace Temperature/Terminal board/Lightning protection\*
- Exchange/replace electronics/comms modules\*
- Add or remove integral indicators\*
- Add or remove external configuration buttons

\* Field replaceable in all electrical environments (including IS) except flameproof without violating agency approvals.

With no performance effects, Honeywell's unique modularity results in **lower inventory needs and lower overall operating costs.**

## Performance Specifications<sup>1</sup>

### Reference Accuracy<sup>2</sup> (conformance to +/-3 Sigma)

Input Type	Maximum Range Limits		Digital Accuracy (+/-)	Output D/A Accuracy (% of span)	Standards
<b>RTD (2,3,4 wire)</b>	<b>° C</b>	<b>° F</b>	<b>° C</b>	<b>%</b>	
Pt25	-200 to 850	-328 to 1562	0.50	0.005	IEC751:1990 (=0.00385)
Pt100	-200 to 850	-328 to 1562	0.10	0.005	IEC751:1990 (=0.00385)
Pt200	-200 to 850	-328 to 1562	0.20	0.005	IEC751:1990 (=0.00385)
Pt500	-200 to 850	-328 to 1562	0.12	0.005	IEC751:1990 (=0.00385)
Pt1000	-200 to 300	-328 to 572	0.10	0.005	IEC751:1990 (=0.00385)
<b>Thermocouples</b>	<b>° C</b>	<b>° F</b>	<b>° C</b>	<b>%</b>	
B	100 to 1820	392 to 3308	0.60	0.005	IEC 584-1 (ITS-90)
E	-200 to 1000	-328 to 1832	0.20	0.005	IEC 584-1 (ITS-90)
J	-200 to 1200	-328 to 2192	0.25	0.005	IEC 584-1 (ITS-90)
K	-200 to 1370	-328 to 2498	0.25	0.005	IEC 584-1 (ITS-90)
N	-200 to 1300	-328 to 2372	0.40	0.005	IEC 584-1 (ITS-90)
R	-50 to 1760	-58 to 3200	0.50	0.005	IEC 584-1 (ITS-90)
S	-50 to 1760	-58 to 3200	0.50	0.005	IEC 584-1 (ITS-90)
T	-250 to 400	-418 to 752	0.20	0.005	IEC 584-1 (ITS-90)
Input Type	Maximum Range Limits		Digital Accuracy (+/-)	Output D/A Accuracy (% of span)	Standards
<b>Other Types</b>	<b>Range</b>			<b>%</b>	
Millivolts	-100 to 1200 mV		0.12 mV	0.005	
Millivolts	-20 to 125 mV		0.015 mV	0.005	
Ohms	0 to 500Ω		0.2 Ohms	0.005	
Ohms	0 to 2000Ω		0.3 Ohms	0.005	
Ohms	0 to 3000Ω		0.45 Ohms	0.005	

1. Digital Accuracy is accuracy of the digital output accessed by the Host system and the handheld communicator

2. Total analog accuracy is the sum of digital accuracy and output D/A Accuracy

3. Output D/A Accuracy is applicable to the 4 to 20mA Signal output

4. For TC inputs, CJ accuracy shall be added to digital accuracy to calculate the total digital accuracy

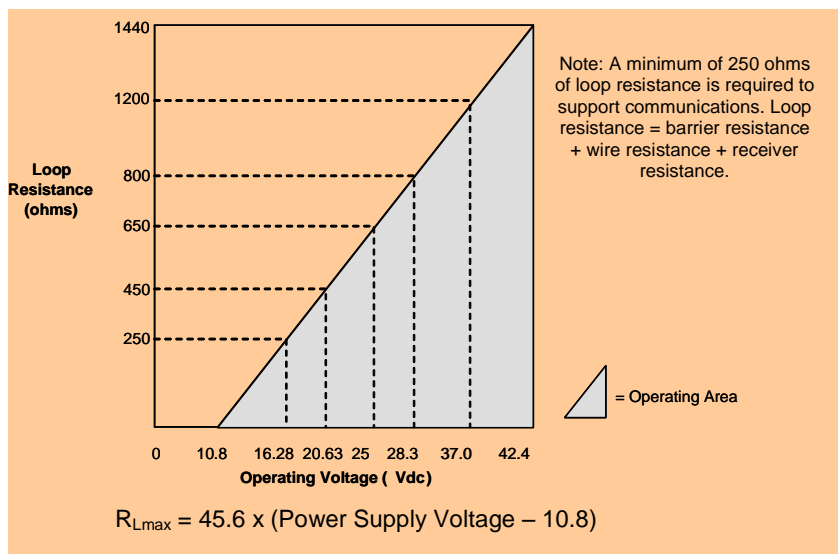


<b>Isolation</b>	2000Vdc (1400Vrms) Galvanic Isolation between inputs and output.
<b>Stray Rejection</b>	<p><b>Common Mode</b>  <i>AC (50 or 60 Hz):</i> 120 dB (with maximum source impedance of 100 ohms) or ± 1 LSB (least significant bit) whichever is greater with line voltage applied.  <i>DC:</i> 120 dB (with maximum source impedance of 50 ohms) or a ±1 LSB whichever is greater with 120 Vdc applied.  <i>DC (to 1 KHz):</i> 50 dB (with maximum source of impedance of 50 ohms) or ±1 LSB whichever is greater with 50 Vac applied.</p> <p><b>Normal Mode</b>  <i>AC (50 or 60 Hz):</i> 60 dB (with 100% span peak-to-peak maximum)</p>
<b>EMC Compliance</b>	EN 61326-1 and EN 61326-3-1 (SIL)
<b>Lightning Protection Option</b>	<p><b>Leakage Current:</b> 10uA max @ 42.4VDC 85°C</p> <p><b>Impulse rating:</b>    8/20uS        5000A (&gt;10 strikes)        10000A (1 strike min.)                                           10/1000uS      200A (&gt; 300 strikes)</p>

**Operating Conditions – All Models**

Parameter	Reference Condition		Rated Condition		Operative Limits		Transportation and Storage	
	°C	°F	°C	°F	°C	°F	°C	°F
<b>Ambient Temperature</b> <sup>1</sup> STT850	25±1	77±2	-40 to 85	-40 to 185	-40 to 85	-40 to 185	-55 to 120	-67 to 248
<b>Humidity</b> %RH	10 to 55		0 to 100		0 to 100		0 to 100	
<b>Supply Voltage Load Resistance</b>	<p><b>HART Models:</b> 10.8 to 42.4 Vdc at terminals (IS versions limited to 30 Vdc)            0 to 1,440 ohms (as shown in Figure 2)</p> <p><b>DE Models:</b> 13.8 to 42.4 Vdc at terminals (IS versions limited to 30 Vdc)            0 to 1,300 ohms (as shown in Figure 2)</p> <p><b>FF Models:</b> 9.0 to 32.0Vdc at terminals</p>							

<sup>1</sup> LCD Display operating temperature -20°C to +70°C . Storage temperature -30°C to 80°C.



**Figure 2 - Supply voltage and loop resistance chart & calculations**

For DE Models, add 3.0V to all values. Maximum voltage for DE is 42.4Vdc and maximum load resistance is 1300Ω.

**Materials Specifications** (see model selection guide for availability/restrictions with various models)

Parameter	Description
<b>Mounting Bracket</b>	Wall or 2" Pipe, Carbon Steel (Zinc-plated) or 316 Stainless Steel
<b>Electronic Housing</b>	Pure Polyester Powder Coated Low Copper (<0.4%)-Aluminum. Meets Type 4X, IP66, & P67. All stainless steel housing is optional. Cover O Ring Material: Silicone
<b>Sensor/Cable Entry</b>	1/2 NPT electrical connection or M20x1.5
<b>Mounting</b>	Can be mounted in virtually any position using the standard mounting bracket. Bracket is designed to mount on 2-inch (50 mm) vertical or horizontal pipe.
<b>Wiring</b>	Accepts up to 16 AWG (1.5 mm diameter).
<b>Dimensions</b>	See <a href="#">Figure 3</a> , <a href="#">Figure 4</a> and <a href="#">Figure 5</a>
<b>Net Weight Lbs (kg)</b>	Alum Transmitter with Display – 2.7 Lbs (1.22kg) Alum Transmitter w/o Display – 2.6 Lbs (1.18kg) SS Transmitter with Display – 4.9 Lbs (2.22kg) SS Transmitter w/o Display – 4.8 Lbs (1.18kg)

**Communications Protocols & Diagnostics****HART Protocol****Version:**

HART 7

**Power Supply**

Voltage: 10.8 to 42.4Vdc at terminals

Load: Maximum 1440 ohms See figure 2

Minimum Load: 0 ohms. (For handheld communications a minimum load of 250 ohms is required)

IEC 61508 Safety Certified SIL 2 and SIL 3

**Honeywell Digitally Enhanced (DE)**

DE is a Honeywell proprietary protocol which provides digital communications between Honeywell DE enabled field devices and Hosts.

**Power Supply**

Voltage: 10.8 to 42.4Vdc at terminals

Load: Maximum 1440 ohms See figure 2

**Foundation Fieldbus (FF)****Power Supply Requirements**

Voltage: 9.0 to 32.0Vdc at terminals

Steady State Current: 17.6 mA

Software Download Current: 27.6 mA

**Available Function Blocks**

Block Type	Qty	Execution Time
Resource	1P	n/a
Transducer	1P	n/a
Diagnostic	1P	n/a
Analog Input	1P, 4I	30 ms
PID w/Autotune	1P, 2I	45 ms
Discrete Input Block	1P, 2I	30 ms
Signal Char (SC)	1P	30 ms
LCD Display	1P	n/a
Input Selector	1P	30 ms
Arithmetic	1P, 2I	30 ms
Output Splitter	1P	30 ms

P = Permanent

I = Instantiable

The AI function block allows the user to configure the alarms to HIGH-HIGH, HIGH, LOW, or LOW-LOW with a variety of priority levels and hysteresis settings

All available function blocks adhere to FOUNDATION Fieldbus standards. PID blocks support ideal & robust PID algorithms with full implementation of Auto-tuning.

**Link Active Scheduler**

Transmitters can perform as a backup Link Active Scheduler and take over when the host is disconnected. Acting as a LAS, the device ensures scheduled data transfers typically used for the regular, cyclic transfer of control loop data between devices on the Fieldbus.

**Number of Devices/Segment**

Entity IS model: 15 devices/segment

**Schedule Entries**

30 maximum schedule entries

30 maximum Links

**Number of VCR's:** 40 max

**Compliance Testing:** Tested according to ITK 6.1.1

**Software Download**

Utilizes Class-3 of the Common Software Download procedure as per FF-883 which allows the field devices of any manufacturer to receive software upgrades from any host.

**Standard Diagnostics**

STT850 top level diagnostics are reported as either critical or non-critical as listed below. All diagnostics are readable via the DD/DTM tools. All critical diagnostics will appear on the Basic and Advanced integral displays, non-critical diagnostics will appear on the Advanced integral display.

**Critical Diagnostics**

Sensor Module Fault

Communications Module Fault

Sensor Communications Fault

Input 1 Fault

Input 2 Fault

**Non Critical Diagnostics (for Advanced Display only)**

Cal 1 Correct

Cal 2 Correct

Sensor Temperature

Sensor 1 Health

Sensor 2 Health

Input 1 Range

Input 2 Range

CJ Range

Input 1

Input 2

Input 1 TB6 (for RTD types only)

Input 2 TB8 (for RTD types only)

Factory Calibration

Loop Supply Voltage

Communications Module Temperature

DAC Temperature Compensation

Sensor Communications

Display Setup



## Approval Certifications:

AGENCY	TYPE OF PROTECTION	COMM. OPTION	FIELD PARAMETERS	AMBIENT TEMP (Ta)
FM Approvals™	<b>Explosionproof:</b> Class I, Division 1, Groups A, B, C, D; <b>Dust Ignition Proof:</b> Class II, III, Division 1, Groups E, F, G; T4 Class I, Zone 1, AEx d IIC Gb T4 Class II, Zone 21, AEx tb IIIC Db T 85°C IP 66	All	Note 1	-50 °C to 85°C
	<b>Intrinsically Safe:</b> Class I, II, III, Division 1, Groups A, B, C, D, E, F, G; T4 Class 1, Zone 0, AEx ia IIC Ga T4  FISCO Field Device (Only for FF Option) Ex ia IIC Ga T4	4-20 mA / DE/ HART	Note 2	-50 °C to 70°C
		Foundation Fieldbus	Note 2	-50 °C to 70°C
	<b>Nonincendive:</b> Class I, Division 2, Groups A, B, C, D locations, Class 1, Zone 2, AEx nA IIC Gc T4	All	Note 1	-50 °C to 85°C
	<b>Enclosure:</b> Type 4X/ IP66/ IP67	All	All	-
Canadian Standards Association (CSA)	<b>Explosion Proof:</b> Class I, Division 1, Groups A, B, C, D; <b>Dust Ignition Proof:</b> Class II, III, Division 1, Groups E, F, G; T4 Ex d IIC Gb T4 Ex tD A21 T 95°C IP 66	All	Note 1	-50 °C to 85°C
	<b>Intrinsically Safe:</b> Class I, II, III, Division 1, Groups A, B, C, D, E, F, G; T4 Class 1, Zone 0, AEx ia IIC Ga T4  FISCO Field Device (Only for FF Option) Ex ia IIC Ga T4	4-20 mA / DE/ HART	Note 2	-50 °C to 70°C
		Foundation Fieldbus	Note 2	-50 °C to 70°C
	<b>Nonincendive:</b> Class I, Division 2, Groups A, B, C, D; T4 Ex nA IIC Gc T4	All	Note 1	-50 °C to 85°C
	<b>Enclosure:</b> Type 4X/ IP66/ IP67	All	All	-
ATEX	<b>Flameproof:</b> II 2 G Ex d IIC Gb T4 II 2 D Ex tb IIIC Db T 85°C IP 66	All	Note 1	-50 °C to 85°C
	<b>Intrinsically Safe:</b> II 1 G Ex ia IIC Ga T4  FISCO Field Device (Only for FF Option) Ex ia IIC Ga T4	4-20 mA / DE/ HART	Note 2	-50 °C to 70°C
		Foundation Fieldbus	Note 2	-50 °C to 70°C
	<b>Nonincendive:</b> II 3 G Ex nA IIC Gc T4	All	Note 1	-50 °C to 85°C
	<b>Enclosure:</b> IP66/ IP67	All	All	All



<b>IECEX (World)</b>	<b>Flameproof :</b> Ex d IIC Gb T4 Ex tb IIIC Db T 85°C IP 66	All	Note 1	-50 °C to 85°C
	<b>Intrinsically Safe:</b> Ex ia IIC Ga T4	4-20 mA / DE/ HART	Note 2	-50 °C to 70°C
	FISCO Field Device (Only for FF Option) Ex ia IIC Ga T4	Foundation Fieldbus	Note 2	-50 °C to 70°C
	<b>Nonincendive:</b> Ex nA IIC Gc T4	All	Note 1	-50 °C to 85°C
	<b>Enclosure:</b> IP66/ IP67	All	All	All

## Notes:

## 1. Operating Parameters:

Analog/ DE/ HART Entity Values:

Voltage= 11 to 42 V DC      Current= 4-20 mA Normal (3.8 – 23 mA Faults)

Foundation Fieldbus

Voltage = 9 to 32 V (FF)      Current = 23 mA

## 2. Intrinsically Safe Entity Parameters

Analog/ DE/ HART Entity Values:

Vmax= Ui = 30V      Imax= li= 225 mA      Ci = 0nF      Li = 0      Pi = 0.9W

Foundation Fieldbus Entity Values:

Vmax= Ui = 30V      Imax= li= 225mA      Ci = 0      Li = 0      Pi =1W

FISCO Field Device

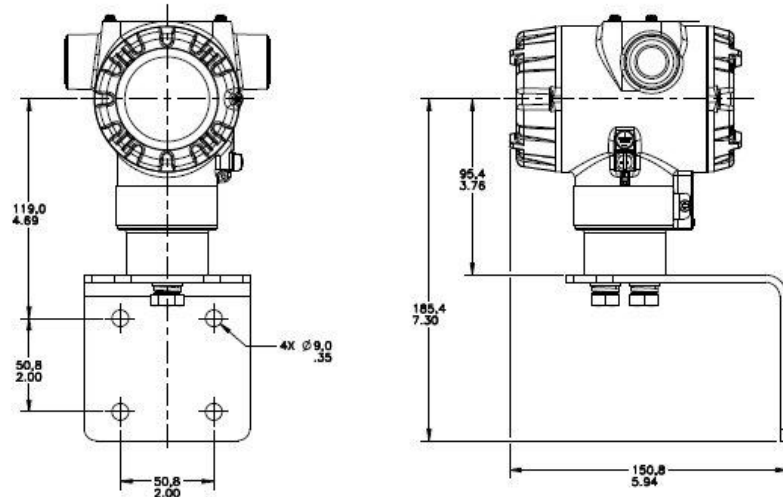
Vmax= Ui = 17.5V      Imax= li= 380 mA      Ci = 0nF      Li = 0      Pi =5.32 W

<b>SIL 2/3 Certification</b>	IEC 61508 SIL 2 for non-redundant use and SIL 3 for redundant use according to EXIDA and TÜV Nord Sys Tec GmbH & Co. KG under the following standards: IEC61508-1: 2010; IEC 61508-2: 2010; IEC61508-3: 2010.
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**Wiring Diagrams**

<p style="text-align: center;">Single T/C      Single 2 Wire RTD or Ohm      Single 3 Wire RTD or Ohm      Single 4 Wire RTD or Ohms      Single mv</p>	<p style="text-align: center;">Redundant T/C      Differential T/C      Differential 2 Wire RTD      Differential 3 wire RTD</p>
<p><b>DE- Single Input Wiring Diagram</b> RTD' Thermocouple mV Connections</p>	<p><b>DE- Dual Input Wiring Diagram</b> Thermocouple and RTD Connections</p>
<p style="text-align: center;">Single T/C      Single 2 Wire RTD or Ohm      Single 3 Wire RTD or Ohm      Single 4 Wire RTD or Ohms      Single mv</p>	<p style="text-align: center;">Averaging, Differential, Redundant or Split Range      Averaging, Differential, Redundant or Split Range      Averaging, Differential, Redundant or Split Range      Dual mV</p>
<p><b>HART/FF – Single Input Wiring Diagram</b> RTD Thermocouple and mV Connections</p>	<p><b>HART/FF – Dual Input Wiring Diagram</b> RTD Thermocouple and Ohm Connections</p>
<p style="text-align: center;">Power Supply 12V to 30V</p>	<p style="text-align: center;">Power Supply 12V to 30V PLC Input</p>
<p><b>Digital Output Connections for mA Load</b></p> <p>Minimum Load = Power Supply Voltage / 40mA Example: If the power supply voltage = 24V then the load must be a minimum of 24 V / 40mA = 600 Ω</p>	<p>Resistor should allow approximately 5mA of drop Example: If the power supply voltage = 24V then the Resistor should be 24 V / 5mA = 4,800Ω</p>
<p><b>Digital Output Connections for mA Load</b></p>	<p><b>Digital Output Connections for PLC Counting Input</b></p>

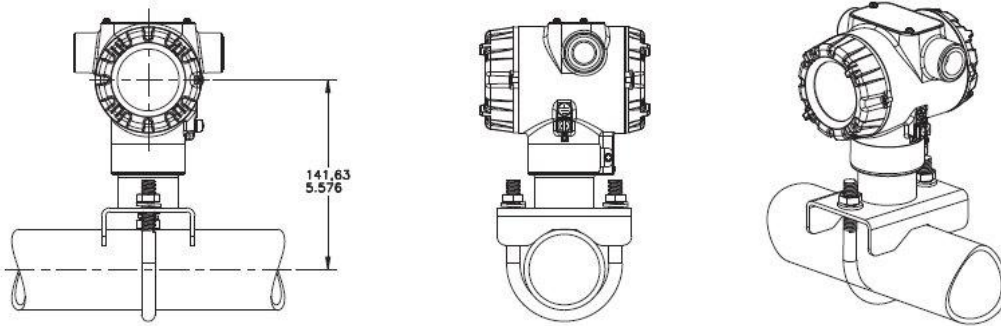
**Mounting & Dimensional Drawings**



**HORIZONTAL WALL MOUNT**

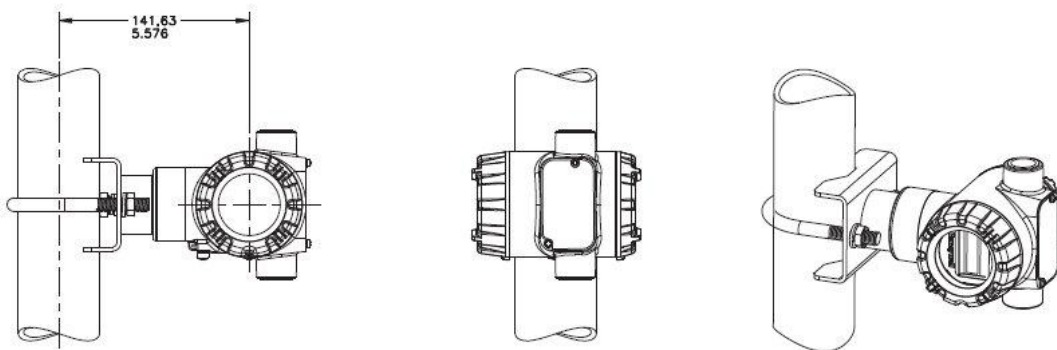
TRANSMITTER ENCLOSURE CAN BE ROTATED A TOTAL OF 90° FROM STANDARD MOUNTING POSITION

**Figure 3 – STT850 Horizontal Wall Mounting**



**HORIZONTAL PIPE MOUNT**

TRANSMITTER ENCLOSURE CAN BE ROTATED A TOTAL OF 90° FROM STANDARD MOUNTING POSITION



**VERTICAL PIPE MOUNT**

TRANSMITTER ENCLOSURE CAN BE ROTATED A TOTAL OF 90° FROM STANDARD MOUNTING POSITION

**Figure 4 – STT850 Pipe Mount, Horizontal & Vertical**

Reference Dimensions:  $\frac{\text{millimeters}}{\text{inches}}$

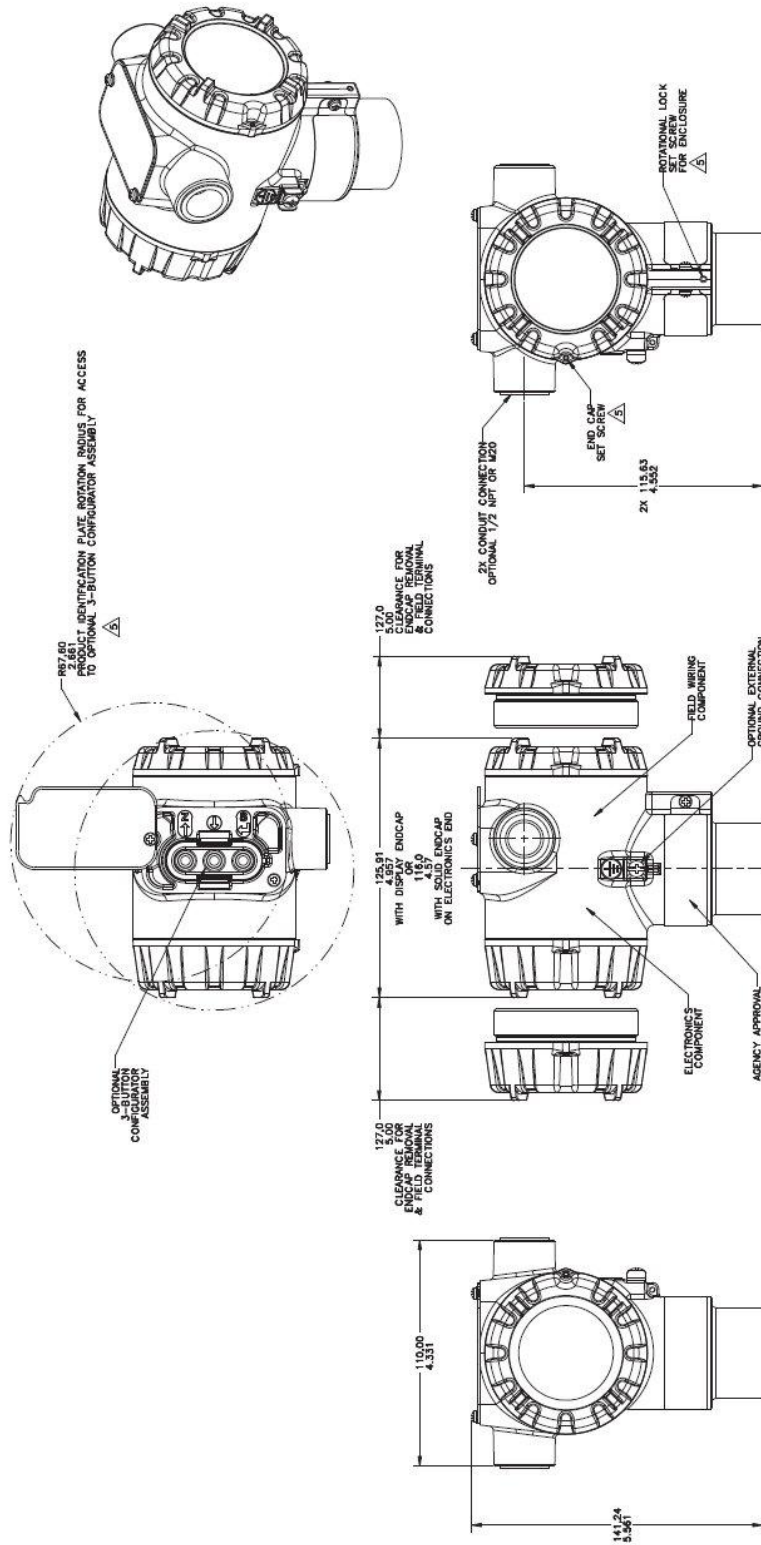


Figure 5 – STT850 Dimensions

Model Selection Guides are subject to change and are inserted into the specifications as guidance only. Prior to specifying or ordering a model check for the latest revision Model Selection Guides which are published at: [www.honeywellprocess.com/en-US/pages/default.aspx](http://www.honeywellprocess.com/en-US/pages/default.aspx)

**Model Selection Guide**

**Model STT850  
Smart Temperature Transmitter**

Model Selection Guide:  
34-44-16-14 Issue 1



**Instructions:** Make selections from all Tables Key through XIII using column below the proper arrow. Asterisk indicates availability. Letter (a) refer to restrictions highlighted in the restrictions table. Tables delimited with dashes.

Key	I	II	III	IV	V	VI	VII	VIII	IX
STT850	-	-	-	-	-	-	-	-	X X X X

KEY NUMBER	Input Type
	Universal Input

Availability Selection ↓

STT850	*
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Table I	No of Inputs
Input Details	Single Dual

S	*
T	*

Table II	Digital output
Digital Output	No

0	*
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TABLE III	Agency Approvals (see data sheet for Approval Code Details)
Approvals	No Approvals Required FM Explosion proof, Intrinsically Safe, Non-incendive, & Dustproof CSA Explosion proof, Intrinsically Safe, Non-incendive, & Dustproof ATEX Explosion proof, Intrinsically Safe & Non-incendive IECEX Explosion proof, Intrinsically Safe & Non-incendive

0	*
A	*
B	*
C	*
D	*

TABLE IV TRANSMITTER ELECTRONICS SELECTIONS				
a. Electronic Housing Material & Connection Type	Housing and Material		Connection	Lightning protection
	Polyester Powder Coated Aluminum		1/2 NPT	None
	Polyester Powder Coated Aluminum		M20	None
	Polyester Powder Coated Aluminum		1/2 NPT	Yes
	Polyester Powder Coated Aluminum		M20	Yes
	316 Stainless Steel (Grade CF8M)		1/2 NPT	None
	316 Stainless Steel (Grade CF8M)		M20	None
	316 Stainless Steel (Grade CF8M)		1/2 NPT	Yes
316 Stainless Steel (Grade CF8M)		M20	Yes	
b. Output/ Protocol	Analog Output		Digital Protocol	
	4-20mA dc 4-20mA dc		HART Protocol DE Protocol	
c. Customer Interface Selections	Indicator	Config Buttons	Languages	
	None	None	None	
	None	Yes (Zero/Span Only)	None	
	Basic	None	English	
	Basic	Yes	English	
	Advanced	None	EN,GR,FR,IT,SP,RU,TU	
Advanced	Yes	EN,GR,FR,IT,SP,RU,TU		

A	*
B	*
C	*
D	*
E	*
F	*
G	*
H	*

_ H	*
_ D	*

_ _ 0	*
_ _ A	*
_ _ B	*
_ _ C	*
_ _ D	*
_ _ E	*

TABLE V CONFIGURATION SELECTIONS			
a. Application Software	Diagnostics		
	Standard Diagnostics		
b. Output Limit, Failsafe & Write Protect Settings	Write Protect	Fail Mode	High & Low Output Limits <sup>3</sup>
	Disabled	High> 21.0mA dc	Honeywell Std (3.8 - 20.8 mA dc)
	Disabled	Low< 3.6mA dc	Honeywell Std (3.8 - 20.8 mA dc)
	Enabled	High> 21.0mA dc	Honeywell Std (3.8 - 20.8 mA dc)
	Enabled	Low< 3.6mA dc	Honeywell Std (3.8 - 20.8 mA dc)
	Enabled	N/A	N/A Fieldbus or Profibus
c. General Configuration	Factory Standard		
	Custom Configuration		

1	*
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_ 1	*
_ 2	*
_ 3	*
_ 4	*
_ 5	g
_ 6	g
_ _ S	*
_ _ C	*

<sup>3</sup> NAMUR Output Limits 3.8 - 20.5mA dc can be configured by the customer or select custom configuration Table Vc

TABLE VI CALIBRATION & ACCURACY SELECTIONS			
a. Accuracy and Calibration	Accuracy	Calibrated Range	Calibration Qty
	Standard	Factory Std	Single Calibration
	Standard	Custom (Unit Data Required)	Single Calibration

A	*
B	*

TABLE VII ACCESSORY SELECTIONS		
a. Mounting Bracket	Bracket Type	Material
	None	None
	Pipe Mounting Bracket	Carbon Steel
	Pipe Mounting Bracket	316 SS
	Wall Mounting Bracket	Carbon Steel
	Wall Mounting Bracket	316 SS
b. Customer Tag	Customer Tag Type	
	No customer tag	
	One Wired Stainless Steel Tag (Up to 4 lines 26 char/line)	
	Two Wired Stainless Steel Tag (Up to 4 lines 26 char/line)	
One Wired Stainless Steel Blank Tag (Up to 4 lines 26 char/line)		
c. Unassembled Conduit Plugs & Adapters	Unassembled Conduit Plugs & Adapters	
	No Conduit Plugs or Adapters Required	
	1/2 NPT Male to 3/4 NPT Female 316 SS Certified Conduit Adapter	
	1/2 NPT 316 SS Certified Conduit Plug	
	M20 316 SS Certified Conduit Plug	
	Minifast® 4 pin (1/2 NPT) (not suitable for X-Proof applications)	
Minifast® 4 pin (M20) (not suitable for X-Proof applications)		

0 _ _ _	*
1 _ _ _	*
3 _ _ _	*
5 _ _ _	*
6 _ _ _	*

_ 0 _ _	*
_ 1 _ _	*
_ 2 _ _	*
_ 3 _ _	*

_ _ A0	*
_ _ A2	n
_ _ A6	n
_ _ A7	m
_ _ A8	n
_ _ A9	m

TABLE VIII Other Certifications and Options	
c. Certifications and Warranty	None - No additional options
	Certificate of Conformance
	Calibration Test Report & Certificate of Conformance
	Certificate of Origin
	SIL2/3 Certificate
	Extended Warranty Additional 1 year
	Extended Warranty Additional 2 years
	Extended Warranty Additional 3 years
	Extended Warranty Additional 4 years
	Extended Warranty Additional 15 years

00	*	b
F3	*	
F1	*	
F5	*	
FE	j	
01	*	b
02	*	
03	*	
04	*	
15	*	

TABLE IX Manufacturing Specials	
Factory	Factory Identification

0000	*
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**MODEL RESTRICTIONS**

Restriction Letter	Available Only with		Not Available with	
	Table	Selection(s)	Table	Selection(s)
g			IVb	_ H,D _
j	IVb	_ H _	Vb	_ 1,2,5,6 _
m	IVa	B,D,F,H _ _		
n	IVa	A,C,E,G _ _		
b	Select only one option from this group			

*Specifications are subject to change without notice.*

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**For more information**



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