

Configuration Data Sheet

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Rosemount 3051S Series

Rosemount 3051S HART® Configuration Data Sheet

BOLD = Required Value
* = Default

Select only one of the items provided
 One or more of the listed items can be selected

Customer Information	
Customer: _____	Contact Name: _____
Phone No: _____	Fax No./Email: _____
P.O./Reference No.: _____	P.O. Line Item: _____
Quote No. _____	Model No.: _____
Customer Signoff: _____	
Tagging	
Hardware Tag: _____	
Software Tag: _____	
Output Information	
Engineering Units =	<input type="radio"/> InH ₂ O* <input type="radio"/> psi <input type="radio"/> Pa <input type="radio"/> ftH ₂ O <input type="radio"/> MPa <input type="radio"/> inHg <input type="radio"/> bar <input type="radio"/> kPa <input type="radio"/> g/cm ² <input type="radio"/> mbar <input type="radio"/> Torr <input type="radio"/> mmH ₂ O <input type="radio"/> inH ₂ O at 4 °C <input type="radio"/> Atm <input type="radio"/> kg/cm ² <input type="radio"/> mmHg <input type="radio"/> mmH ₂ O at 4 °C
Output =	<input type="radio"/> Linear* <input type="radio"/> Square Root (For DP transmitters only)
Range Points: 4mA = _____ (0*)	20mA = _____ (URL*)

NOTE

Custom configuration information below this line requires C1 option code.

Digital Display Information			
<input type="checkbox"/> Engineering Units*	<input type="checkbox"/> % of Range	<input type="checkbox"/> Scaled Variable	<input type="checkbox"/> Sensor Temperature
Process Variable Output Assignments			
Primary Variable:	<input type="radio"/> Measured Pressure*	<input type="radio"/> Scaled Variable	
Secondary Variable:	<input type="radio"/> Measured Pressure	<input type="radio"/> Scaled Variable	<input type="radio"/> Device Temperature*
	<input type="radio"/> Standard Deviation ⁽¹⁾	<input type="radio"/> Mean ⁽¹⁾	<input type="radio"/> Coefficient of Variation ⁽¹⁾
Tertiary Variable:	<input type="radio"/> Measured Pressure	<input type="radio"/> Scaled Variable*	<input type="radio"/> Device Temperature
	<input type="radio"/> Standard Deviation ⁽¹⁾	<input type="radio"/> Mean ⁽¹⁾	<input type="radio"/> Coefficient of Variation ⁽¹⁾
Quaternary Variable ⁽¹⁾ :	<input type="radio"/> Measured Pressure	<input type="radio"/> Scaled Variable	<input type="radio"/> Device Temperature
	<input type="radio"/> Standard Deviation	<input type="radio"/> Mean	<input type="radio"/> Coefficient of Variation

(1) Requires DA2 option code.



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Output Information	
Transmitter Sensor Temp. Units: <input type="radio"/> °C* <input type="radio"/> °F	Damping (0-60 sec.): _____ (0.4 sec.*)

Transmitter Information	
Descriptor: _____ (16 characters)	
Message: _____ (32 characters)	
Date: _____ (Date of Calibration*)	

Signal Selection	
<input type="radio"/> 4–20 mA with simultaneous digital signal based on HART protocol* <input type="checkbox"/> Burst mode of HART digital process variable Burst mode output options: <input type="radio"/> Primary variable <input type="radio"/> All dynamic variables in engineering units <input type="radio"/> Primary variable in percent of range and mA <input type="radio"/> All dynamic variables in engineering units and the primary variable mA value <input type="radio"/> Multidrop Communication Transmitter Address (1-15): _____ (1*)	

Security Information	
Write Protect: <input type="radio"/> On <input type="radio"/> Off*	Local Zero and Span: <input type="radio"/> Enabled* <input type="radio"/> Disabled

Custom Alarm and Saturation Signal Levels	
All categories must be completed for custom configuration.	
Requires Option C6 or C7	
Low Alarm: (\leq _____ mA) - must be between 3.8 and 3.6	High Alarm (\geq _____ mA) - must be between 20.2 and 23.0
Low Saturation (_____ mA) - must be between 3.9 and 3.7	High Saturation (_____ mA) - must be between 20.1 and 21.5
* Low alarm must be 0.1 mA lower than the low saturation value	* High alarm must be at least 0.1 mA higher than the high saturation value

For Reference Only:	
Alarm Values: Values (mA) the transmitter outputs if it detects a gross malfunction condition.	
Saturation Values: Values (mA) the transmitter outputs if applied pressure goes outside the 4–20 mA range values.	

Scaled Variable Information	
Scaled Units = _____ (5 characters max— valid characters include 0-9, A-Z, /, %, -, and *)	
Transfer Function: <input type="radio"/> Linear* Linear Scaled Variable (with Linear option only) Low pressure value = _____ (Eng. Units) High pressure value = _____ (Eng. Units) Low scaled value = _____ (Scaled Units) High scaled value = _____ (Scaled Units) Linear Offset = _____ (Eng. Units)	
<input type="radio"/> Square Root Square Root Scaled Variable (with Square Root option only) Low pressure value: 0 (Eng. Units) High pressure value = _____ (Eng. Units) Low scaled value: 0 (Scaled Units) High scaled value = _____ (Scaled Units) Low Flow Cut Off: <input type="radio"/> On <input type="radio"/> Off* _____ (Scaled unit)	
Range Values—both categories must be completed. (used when scaled variable is set to primary variable)	
LRV _____ (Scaled Unit) (seven characters max)	URV _____ (Scaled Unit) (seven characters max)

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Process Alert Setpoints	
Process alert setpoints are values set by the user where the transmitter outputs a HART message and digital display information when the applied pressure or temperature goes outside the designated range. The pressure values are limited to the range of the transmitter.	
Pressure Process Alert (HART signal only)	Temperature Process Alert (HART signal only)
<input type="radio"/> On <input type="radio"/> Off*	<input type="radio"/> On <input type="radio"/> Off*
<input type="checkbox"/> Low alert _____ (Eng. Unit)	<input type="checkbox"/> Low alert _____ (Temp. Unit -40°F, -40 °C)
(LRL ≤ Low Alert ≤ High Alert ≤ URL)	(-40 °C ≤ Low Alert ≤ High Alert ≤ 85°C)*must have a 5°C
<input type="checkbox"/> High Alert _____ (Eng. Unit)	difference
	<input type="checkbox"/> High Alert _____ (Temp. Unit 185°F, 85 °C)
Service Alert ⁽¹⁾	
Service Alert is a configurable countdown timer that provides an alert and custom message to the user.	
Alert Mode	Countdown time
<input type="radio"/> On <input type="radio"/> Off*	Years _____
Message _____	Days _____
	Hours _____

(1) Requires DA2 option code.

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