

Rosemount™ 3051S HART® Configuration Data Sheet

BOLD = Required value

Select only one of the items provided

***** = Default value

One or more of the listed items can be selected

Customer information	
Customer: _____	Contact name: _____
P.O./reference no: _____	Fax no./email: _____
Phone no.: _____	P.O. line item: _____
Quote no.: _____	Model no.: _____
Customer sign-off: _____	

Tagging	
Hardware tag: _____	(56 characters)
Software tag: _____	(8 characters)
Long software tag ⁽¹⁾ : _____	(32 characters)

1. Requires DA2 option code.

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: 4 mA = _____	(0*)	20 mA = _____	(URL*)		

Note

Custom configuration information below this line requires C1 option code.

Digital display information			
<input type="radio"/> Engineering units*	<input type="radio"/> % of range	<input type="radio"/> Scaled variable	<input type="radio"/> 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 ⁽¹⁾	<input type="radio"/> Mean ⁽¹⁾	<input type="radio"/> Coefficient of variation ⁽¹⁾

1. Requires DA2 option code.



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="radio"/> Burst mode of HART digital process variable Burst mode output options: <input type="radio"/> Primary variable <input type="radio"/> Primary variable in percent of range and mA <input type="radio"/> All dynamic variables in engineering units <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
HART lock ⁽¹⁾ : <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 ⁽²⁾ : ≤ _____ mA (must be between 3.8 and 3.6)	High alarm ⁽³⁾ : ≥ _____ 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)
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.	

1. Requires DA2 option code.
2. Low alarm must be 0.1 mA lower than the low saturation value.
3. High alarm must be at least 0.1 mA higher than the high saturation value.

Scaled variable information	
Scaled units = _____ (5 characters max— valid characters include 0–9, A–Z, /, %, -, and *)	
Transfer function:	
<input type="radio"/> Linear*	<input type="radio"/> Square root
Linear scaled variable (with linear option only)	Square root scaled variable (with square root option only)
Low pressure value = _____ (English units)	Low pressure value: 0 (English units)
High pressure value = _____ (English units)	High pressure value = _____ (English units)
Low scaled value = _____ (Scaled units)	Low scaled value: 0 (Scaled units)
High scaled value = _____ (Scaled units)	High scaled value = _____ (Scaled units)
Linear offset = _____ (English units)	Low flow cut-off: <input type="radio"/> On <input type="radio"/> Off* _____ (Scaled units)
Range values—both categories must be completed. (used when scaled variable is set to primary variable)	
LRV _____ (Scaled units) (7 characters max)	URV _____ (Scaled units) (7 characters max)

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 _____ (English units)	<input type="checkbox"/> Low alert _____ (Temp. units -76 °F[-60°C])
(LRL ≤ low alert ≤ high alert ≤ URL)	-60 °C ≤ low alert ≤ high alert ≤ 85 °C* (must have a 5 °C difference) ⁽¹⁾
<input type="checkbox"/> High alert _____ (English units)	<input type="checkbox"/> High alert _____ (Temp. units 185 °F[85 °C])

1. Option code DA2 temp. units -40 °F (-40 °C) ≤ low alert ≤ high alert ≤ 85 °C* (must have a 5 °C difference).

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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