

Configuration Data Sheet

HART® / 4–20 mA / AND SAFETY CERTIFIED TRANSMITTER

★ = Default Configuration

Customer Information

Customer	Model No.
P.O. No.	Line Item

Sensor

Sensor Type	Sensor 1	No. of Leads	Sensor 2 (dual-sensor option)	No. of Leads
	<input type="checkbox"/> Pt 100 $\alpha = 0.00385$	2-Wire	Pt 100 $\alpha = 0.00385$	2-Wire
	Pt 100 $\alpha = 0.003916$	3-Wire	Pt 100 $\alpha = 0.003916$	3-Wire
	Pt 200 $\alpha = 0.00385$	4-Wire	Pt 200 $\alpha = 0.00385$	
	Pt 500 $\alpha = 0.00385$		Pt 500 $\alpha = 0.00385$	
	Pt 1000 $\alpha = 0.00385$		Pt 1000 $\alpha = 0.00385$	
	Cu 10		Cu 10	
	Ni 120		Ni 120	
	Transmitter Sensor Matching (C2 Option)		Transmitter Sensor Matching (C2 Option)	
	Nonstandard (C7 Option), Attach Calibration Schedule		Nonstandard (C7 Option), Attach Calibration Schedule	
	Ohms		Ohms	
	NIST Type B T/C	NIST Type S T/C	NIST Type B T/C	NIST Type S T/C
	NIST Type E T/C	NIST Type T T/C	NIST Type E T/C	NIST Type T T/C
	NIST Type J T/C	mV	NIST Type J T/C	mV
	NIST Type K T/C	DIN Type L T/C	NIST Type K T/C	DIN Type L T/C
	NIST Type N T/C	DIN Type U T/C	NIST Type N T/C	DIN Type U T/C
	NIST Type R T/C	Type W5Re/W26Re T/C	NIST Type R T/C	Type W5Re/W26Re T/C

Note: A nonstandard sensor type can only be used for Sensor 1 or Sensor 2, not both.

4 mA Value	0 °C	_____ °C	_____ °F	_____ °R	_____ °mV	_____ °K	_____ Ohms
20 mA Value	100 °C	_____ °C	_____ °F	_____ °R	_____ °mV	_____ °K	_____ Ohms
Damping	5 Seconds	Other _____ (Value must be less than 32 seconds)					

Tagging

Hardware Tag _____
 Software Tag _____ (8 characters maximum)

Transmitter Information

Integral Meter (if ordered)	Alternating mA and Engineering Units	mA	Alternating Sensor 1 and Sensor 2
	Engineering Units	Sensor 1 Engineering Units	Differential Engineering Units
	Percent	Sensor 2 Engineering Units	Average Engineering Units
	Alternating Differential Temperature, Sensor 1, and Sensor 2		

Descriptor (C1 Option) _____ (16 characters maximum)

Message (C1 Option) _____ (32 characters maximum)

Date (C1 Option) Day ____ (numeric) Month ____ (alphabetic) Year ____ (numeric)

Jumper Selection

Failure Mode	High	Low
Software Security	Off	On

= Default Configuration

Signal Selection

4-20 mA with simultaneous digital signal based on HART protocol

Burst Mode of HART digital process variable

Burst Mode output options:

Primary variable in engineering units

Primary variable in percentage of range

All dynamic variables in engineering units and the primary variable mA value

Multidrop communication (Not applicable for Safety Certified transmitter.)

Note: This option fixes the transmitter's analog output at 4 mA.

Choose transmitter address for each transmitter (1 -15) _____

Note: Default transmitter address is 1 if multidrop communication is selected.

Alarm and Saturation Values

Rosemount Standard

NAMUR-compliant. Available with option code A1 or CN.

Custom (option code C1).

High Alarm Level: _____ mA (must be between 21.0 and 23.0 mA)

Low Alarm Level: _____ mA (must be between 3.5 and 3.75 mA)

High Saturation Level: _____ mA (must be between 20.5 mA and the High Alarm Value minus 0.1 mA, 20.5 to 20.9 mA for safety certified)

Low Saturation Level: _____ mA (must be between the Low Alarm Value plus 0.1 mA and 3.9 mA, minimum 3.7 mA for safety certified)

Configuration Data Sheet

FOUNDATION™ Fieldbus transmitter

= Default Configuration

Customer Information

Customer	Model No.
P.O. No.	Line Item

Transmitter Tagging

Hardware Tag _____

 (2 lines x 28 character max.)

Physical Device Tag _____
 (32 character max.)

Integral Meter (Choose up to 4)

Sensor 1 Sensor 2 Terminal Temperature
 Average Temperature Differential Temperature

Transmitter Information

Descriptor _____
 (C1 Option) (32 characters maximum)

Message _____
 (C1 Option) _____
 (48 characters maximum)

Date Day ___ Month ___ Year ___
 (C1 Option) Hour ___ Minute ___ Second ___

Security

Write Protect (hardware and software) Off On

Damping

5 Seconds Other _____ (values must be less than 32 seconds)

Dual Sensor Configuration

Drift Limit
 Default Other _____

Hot Backup
 Enable Disable

Note: Configure Sensor Information on the next page to complete your FOUNDATION Fieldbus Configuration Data Sheet.

Sensor 1	
Sensor Tag _____ (32 Characters Max)	
Type	
<input type="checkbox"/> Pt 100 α = 0.00385 ★	
Pt 100 = 0.003916	
Pt 200 = 0.00385	
Pt 500 = 0.00385	
Pt 1000 = 0.00385	
Cu 10	
Ni 120	
Transmitter Sensor Matching (C2 Option)	
Nonstandard (C7 Option), Attach Calibration Schedule	
Ohms	
NIST Type B T/C	
NIST Type E T/C	
NIST Type J T/C	
NIST Type K T/C	
NIST Type N T/C	
NIST Type R T/C	
NIST Type S T/C	
NIST Type T T/C	
mV	
DIN Type L T/C	
DIN Type U T/C	
Type W5Re/W26Re T/C	
Number of Leads	
<input type="checkbox"/> 2-wire <input type="checkbox"/> 3-wire <input type="checkbox"/> 4-wire	
Measurement Point	
LO _____ HI _____	
Units	
<input type="checkbox"/> mV <input type="checkbox"/> °C	
<input type="checkbox"/> Ohms <input type="checkbox"/> °F	
<input type="checkbox"/> K <input type="checkbox"/> °R	
Alarms ⁽¹⁾ Priority (0-15)	
HI HI Alarm _____	
HI Alarm _____	
LO Alarm _____	
LO LO Alarm _____	

Sensor 2	
Sensor Tag _____ (32 Characters Max)	
Type	
Pt 100 = 0.00385	
Pt 100 = 0.003916	
Pt 200 = 0.00385	
Pt 500 = 0.00385	
Pt 1000 = 0.00385	
Cu 10	
Ni 120	
Transmitter Sensor Matching (C2 Option)	
Nonstandard (C7 Option), Attach Calibration Schedule	
Ohms	
NIST Type B T/C	
NIST Type E T/C	
NIST Type J T/C	
NIST Type K T/C	
NIST Type N T/C	
NIST Type R T/C	
NIST Type S T/C	
NIST Type T T/C	
mV	
DIN Type L T/C	
DIN Type U T/C	
Type W5Re/W26Re T/C	
Number of Leads	
<input type="checkbox"/> 2-wire <input type="checkbox"/> 3-wire	
Measurement Point	
LO _____ HI _____	
Units	
<input type="checkbox"/> mV <input type="checkbox"/> °C	
<input type="checkbox"/> Ohms <input type="checkbox"/> °F	
<input type="checkbox"/> K <input type="checkbox"/> °R	
Alarms ⁽¹⁾ Priority (0-15)	
HI HI Alarm _____	
HI Alarm _____	
LO Alarm _____	
LO LO Alarm _____	

Additional Input	
Sensor Tag _____ (32 Characters Max)	
<input type="checkbox"/> Differential Temperature or	
<input type="checkbox"/> Terminal Temperature	
Measurement Point	
LO _____ HI _____	
Units	
<input type="checkbox"/> mV <input type="checkbox"/> °C	
<input type="checkbox"/> Ohms <input type="checkbox"/> °F	
<input type="checkbox"/> K <input type="checkbox"/> °R	
Alarms ⁽¹⁾ Priority (0-15)	
HI HI Alarm _____	
HI Alarm _____	
LO Alarm _____	
LO LO Alarm _____	

Product Data Sheet

00813-0100-4021, Rev FA
Catalog 2006 - 2007

Rosemount 3144P

*Rosemount, the Rosemount logotype, and Hot Backup are registered trademarks of Rosemount Inc.
PlantWeb and the PlantWeb logotype is a registered trademark of Emerson Process Management.
HART is a registered trademark of the HART Communication Foundation.
Eurofast and Minifast are registered trademarks of Turck Inc.
FOUNDATION is a trademark of the Fieldbus Foundation.
All other marks are the property of their respective owners.*

Emerson Process Management

Rosemount Inc.

8200 Market Boulevard
Chanhassen, MN 55317 USA
T (U.S.) 1-800-999-9307
T (International) (952) 906-8888
F (952) 949-7001

www.rosemount.com



Emerson Process Management

Heath Place
Bognor Regis
West Sussex PO22 9SH
England
Tel 44 (1243) 863 121
Fax 44 (1243) 867 554

Emerson Process Management Asia Pacific Private Limited

1 Pandan Crescent
Singapore 128461
T (65) 6777 8211
F (65) 6777 0947
Enquiries@AP.emersonprocess.com



EMERSON
Process Management