ProSense® XTD Temperature Transmitters - DIN Rail Mount



XTD

Features - Non-programmable Models

- Sensor Types:
- Models for thermocouple Types J, K, or T
- Models for RTD Type Pt100 3-wire
- Select from a variety of pre-configured measuring ranges
- Internal cold junction compensation for thermocouple input models
- Transmitter is powered by 12-35 VDC and is reverse-polarity protected
- Output is linearized 2-wire 4–20 mA current loop
- Up scale signal for sensor lead break or short circuit detection (NAMUR NE 43 fault response)
- Mounts on 35mm DIN rail in a control panel
- 2 kVAC isolation between input and output

ProSense XTD Series DIN Rail Mount Temperature Transmitter

Part Number	Input Type	Range	Pcs/Pkg	Wt(lb)	Price
XTD-N40140F-PT1	Pt100 RTD (to IEC 751) (a= 0.00385)	-40 to +140 °F (-40 to 60 °C)	1	0.2	
XTD-0100F-PT1		0 to 100 °F (-17.8 to +37.8 °C)	1	0.2	
XTD-0200F-PT1		0 to 200 °F (-17.8 to +93.3 °C)	1	0.2	
XTD-0300F-PT1		0 to 300 °F (-17.8 to +148.9 °C)	1	0.2	
XTD-0500F-PT1		0 to 500 °F (-17.8 to +260 °C)	1	0.2	
XTD-0100F-J	J thermocouple (to NIST Monograph 175, IEC584)	0 to 100 °F (-17.8 to +37.8 °C)	1	0.2	
XTD-0200F-J		0 to 200 °F (-17.8 to +93.3 °C)	1	0.2	
XTD-0300F-J		0 to 300 °F (-17.8 to +148.9 °C)	1	0.2	
XTD-0500F-J		0 to 500 °F (-17.8 to +260 °C)	1	0.2	
XTD-01000F-J		0 to 1000 °F (-17.8 to +537.8 °C)	1	0.2	
XTD-0100F-K	K thermocouple (to NIST Monograph 175, IEC584)	0 to 100 °F (-17.8 to +37.8 °C)	1	0.2	
XTD-0200F-K		0 to 200 °F (-17.8 to +93.3 °C)	1	0.2	
XTD-0300F-K		0 to 300 °F (-17.8 to +148.9 °C)	1	0.2	
XTD-0500F-K		0 to 500 °F (-17.8 to +260 °C)	1	0.2	
XTD-0800F-K		0 to 800 °F (-17.8 to +426.7 °C)	1	0.2	
XTD-01000F-K		0 to 1000 °F (-17.8 to +537.8 °C)	1	0.2	
XTD-01500F-K		0 to 1500 °F (-17.8 to +815.5 °C)	1	0.2	
XTD-02000F-K		0 to 2000 °F (-17.8 to +1093.3 °C)	1	0.2	
XTD-N2000F-T	T thermocouple (to NIST Monograph 175, IEC584)	-200 to 0 °F (-128.9 to -17.8 °C)	1	0.2	
XTD-N100100F-T		-100 to 100 °F (-73.3 to +37.8 °C)	1	0.2	
XTD-0200F-T		0 to 200 °F (-17.8 to +93.3 °C)	1	0.2	



Click on the thumbnail or go to https://www.automationdirect.com/VID-TE-0002 for a short video on DIN Rail Mounted Temperature Transmitters



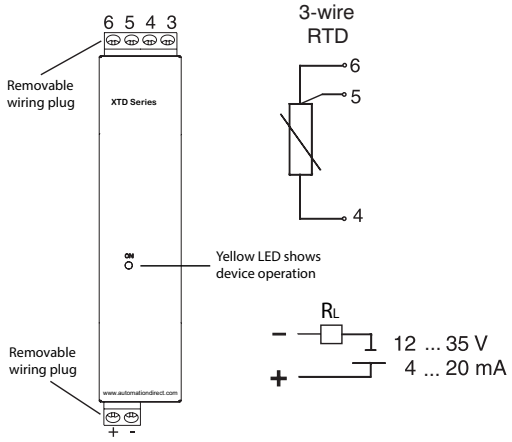
Click on the thumbnail or go to https://www.automationdirect.com/VID-TE-0006 for a short video on Remote Temperature Sensing

Scan the QR Code above or click to view the Fixed Range XTD Series product insert.

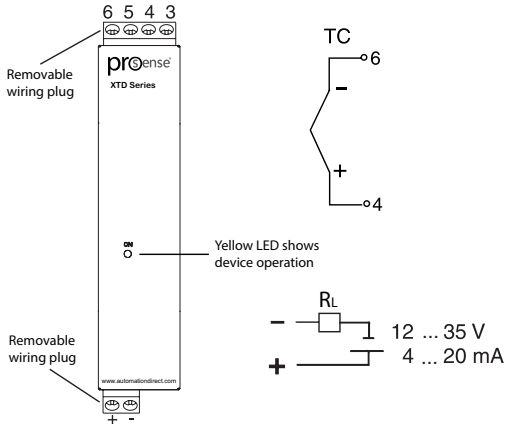
XTD Temperature Transmitters - DIN Rail Mount

Wiring

XTD PT1

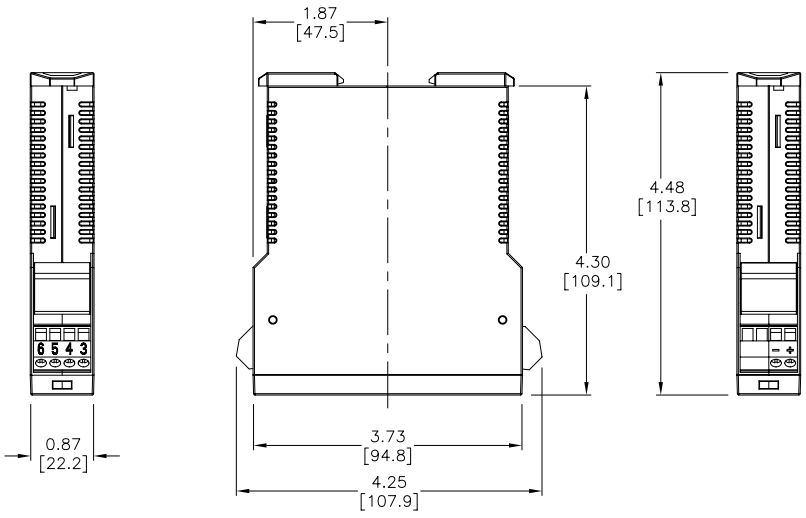


XTD J, K, & T



Dimensions

inches [mm]



ProSense® Temperature Transmitter Configuration Software

Quick and easy configuration with Free XT-SOFT and ProSense Field Device Configurator Software – NO decade box, meters, or signal generators needed!

Overview

XT-SOFT PC software is a utility program that allows users to easily configure ProSense XTD-0-UNV, and XTP series temperature transmitters and ETS series digital temperature sensors.

ProSense Field Device Configurator is a utility program that allows users to easily configure, monitor, and retrieve diagnostic information from the ProSense XTH2 and XTD2 series temperature transmitters.

Download your free copy of XT-SOFT and ProSense Field Device Configurator at www.AutomationDirect.com and connect your transmitter to the PC through an XT-USB configuration cable (purchased separately). An XT-M12 adapter is also required when connecting to an XTP series transmitter.

XT-SOFT System Requirements:

- Windows 10, 11
- 1 USB 2.0 Port
- 128 MB hard disk space

ProSense XT-SOFT

ProSense Field Device Configurator System Requirements:

- Windows 10, 11
- 1 USB 2.0 Port
- 25 MB hard disk space
- Microsoft .Net Framework ≥4.8
- PDF Reader

XTP Series Configuration Parameters (Requires XT-SOFT):

- Measuring unit (°C/°F)
- Measuring range limits -50 to +150 °C (-58 to +302 °F)
- Fault condition reaction (≤ 3.6 mA or ≥ 21.0 mA)
- Output (4–20 mA or 20–4 mA)
- Filter (0 to 8s)
- Offset (-9.9 to +9.9 K)
- Measurement point identification/TAG
- Output simulation drives output to a fixed value



XTP Series

XTH & XTD Configuration Parameters: (Requires XT-SOFT)

- Sensor Type:
- Thermocouple Types J, K, T, E, N, R, S, U, B, C, D, L
- RTD Types Pt100, Pt500, Pt1000, Pt50, Ni100, Ni120, Ni500, Ni1000
- Linear Resistance 10 to 400 Ohms, 10 to 2000 Ohms
- Millivolts -10 to +100 mV
- Wiring connection 2, 3, or 4-wire (RTD or Linear Resistance only)
- Measuring range start and end points
- Selectable units of °F or °C
- Choose from internal or external cold junction compensation (TC only)
- Wire resistance compensation (2-wire RTD or Linear Resistance only)
- Output action of 4–20 mA or 20–4 mA
- Selectable up scale or down scale signal for sensor lead break or short circuit detection (NAMUR NE43 fault response)
- Adjustable digital filter time constant to compensate for undesirable input fluctuations
- Zero point correction offset factor in °F or °C



XTH Series



XTD Series

ProSense® Temperature Transmitter Configuration Software

XTH2 & XTD2 Configuration Parameters (Requires Field Device Configurator):

- Sensor Type:
- Thermocouple Types J, K, T, E, N, R, S, U, B, C, D, L
- RTD Types Pt100, Pt500, Pt1000, Pt50, Ni100, Ni120, Ni500, Ni1000
- Linear Resistance 10 to 400 Ohms, 10 to 2000 Ohms
- Millivolts -20 to +100 mV
- Wiring connection 2, 3, or 4-wire (RTD or Linear Resistance only)
- Measuring range start and end points
- Selectable units of °F, °C, K, Ohm and mV
- Choose from internal or external cold junction compensation (TC only)
- Wire resistance compensation (2-wire RTD or Linear Resistance only)
- Output action of 4–20 mA or 20–4 mA
- Selectable up scale or down scale signal for sensor lead break or short circuit detection (NAMUR NE43 fault response)
- Adjustable digital filter time constant to compensate for undesirable input fluctuations
- Zero point correction offset factor in °F or °C



XTH2 Series



XTD2 Series

ETS Series Configuration Parameters (Requires XT-SOFT):

- Basic Settings:
- Measuring unit (°C/°F/K)
- Offset: Configure zero point: ±18 °F (±10 °C/K)
- Display - Measured value display
  Measured value display rotated 180 deg. Set switch point display
  Set switch point display rotated 180 deg. Display off
  Display off rotated 180 deg.
- Damping: display value, output signal: 0 (no damping) to 40s (in increments of 1 second)
- DESINA® - PIN assignment of the M12 connector is in accordance with the guidelines of DESINA
- Settings for Switch Output:
- Switching characteristic - Window/NC contact
  Hysteresis/NC contact
  Window/NO contact
  Hysteresis/NO contact
  Analog output (if applicable)
- Switch point value: -57.1 to +302 °F (-49.5 to +150 °C) in increments of 0.18 °F (0.1 °C)
- Switch-back point value: -58 to +300 °F (-50 to 149 °C) in increments of 0.18 °F (0.1 °C)
- Switch point delay: 0 to 99s in increments of 0.1s
- Switch-back point delay: 0 to 99s in increments of 0.1s
- Settings for Analog Output (if applicable):
- Value for 4mA: -58 to +266 °F (-50 to +130 °C) Lower range value in increments of 0.18 °F (0.1 °C)
- Value for 20mA: -22 to +302 °F (-30 to +150 °C) Upper range value in increments of 0.18 °F (0.1 °C)
- Error current - Current value in event of error:
  Minimum = ≤ 3.6 mA
  Maximum = ≥ 21.0 mA
  HOLD = last value
- Settings for Service Functions:
- Locking code - Enter the locking code for enabling the device.
- Change locking code - Freely selectable code 1 to 9999.
  0 = no locking
- Simulation output 1 or 2 - OFF: No simulation
  OPEN: Switch output open
  CLOSE: Switch output closed
  Simulation values for analog output in mA (3.5 / 4.0 / 8.0 / 12.0 / 16.0 / 20.0 / 21.7)



ETS Series

ProSense® Temperature Transmitter Configuration Software





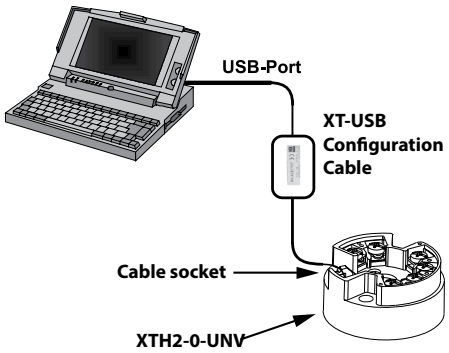


XT-SOFT *XT-USB* *XT-M12*

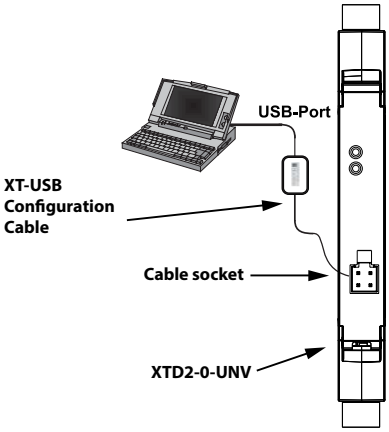
Part No.	Description	Pcs/Pkg	Wt(lb)	Price
XT-SOFT	ProSense configuration software, free download. For use with ProSense temperature transmitter XTP series, digital temperature sensor ETS series and models XTH-0-UNV, XTD-0-UNV.	1	N/A	Free Download
Field Device Configurator	ProSense configuration software, free download. For use with ProSense temperature transmitter series XTH2-0-UNV and XTD2-0-UNV.	1	N/A	Free Download
XT-USB	ProSense configuration cable, USB to keyed 4-pin male, 7.9 ft/2.4 m cable length. For use with XT-SOFT and Field Device Configurator software, ProSense temperature transmitter XTP series, digital temperature sensor ETS series and models XTH-0-UNV, XTD-0-UNV, XTH2-0-UNV, and XTD2-0-UNV.	1	0.4	
XT-M12	ProSense adapter, keyed 4-pin female to 4-pin M12. For use with ProSense temperature transmitter XTP series and XT-USB cable.	1	0.1	

Connection Examples

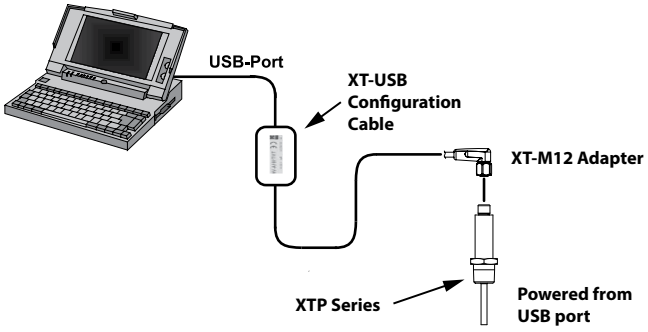
XTH2-0-UNV Connection (Requires Field Device Configurator)



XTD2-0-UNV Connection (Requires Field Device Configurator)

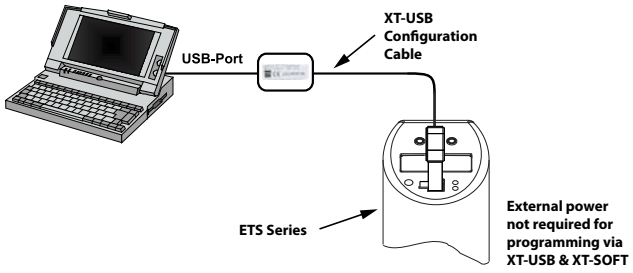


XTP Series Connection (Requires XT-SOFT)



Note: XT-SOFT version 1.27.13.0 or later required for use with the XTP series transmitters

ETS Series Connection (Requires XT-SOFT)



Note: XT-SOFT version 1.27.15.0 or later required for use with the ETS Series.

Scan the QR Code or click to view the help file for the XT-SOFT software.

Scan the QR Code or click to view the help file for the ProSense Field Device Configurator software.