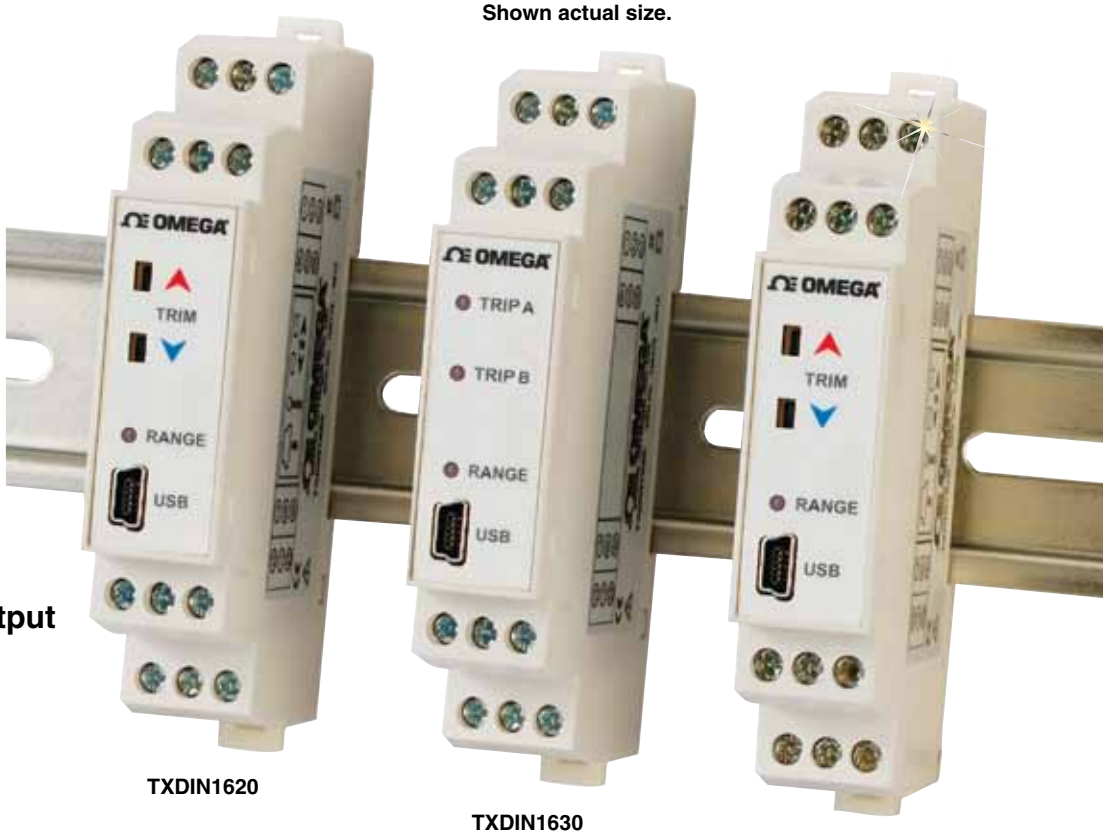
Universal DIN Rail Transmitter

Free Software* Download, Visit omega.com/ftp

TXDIN1600 Series

5 YEAR WARRANTY

Shown actual size.



TXDIN1620

TXDIN1630

TXDIN1610

- **Simple Configuration Via USB Port**
- **Universal Pt100, Thermocouple, mV, mA Input**
- **Isolated Input**

TXDIN1610

- **Pushbutton User Trim**
- **4 to 20 mA, 2-Wire Output**

TXDIN1620

- **Pushbutton User Trim**
- **3-Wire Isolated Voltage Output**

TXDIN1630

- **Dual Relay Outputs 250 Vac 1 Amp**
- **Relay Isolated From Each Other**

The TXDIN1600 Series is a new generation DIN rail mounted temperature transmitter. It has been designed to accept most common process and temperature sensor inputs and provide the user with a standard two wire 4 to 20 mA output signal. Isolation is provided between input and output and all temperature ranges are linear to temperature.

Designed for ease of use, our latest USB interface is fitted for quick and easy configuration. Just connect a standard USB cable between the TXDIN1600 and your PC. Using our free configuration software, your PC will automatically upload the existing configuration data and guide you through any changes you wish to make. To further help save time, the TXDIN1600 does not need to be wired to a power supply during the configuration process, it is powered via the USB interface from your PC.

The TXDIN1600 is also provided with user pushbutton trim, allowing trim adjustments at both 4 mA and 20 mA. The user trim function can be locked during configuration if not required. The range led indicates out of range input during normal operation, during user trim it is used to indicate the stage of trim.

Specifications

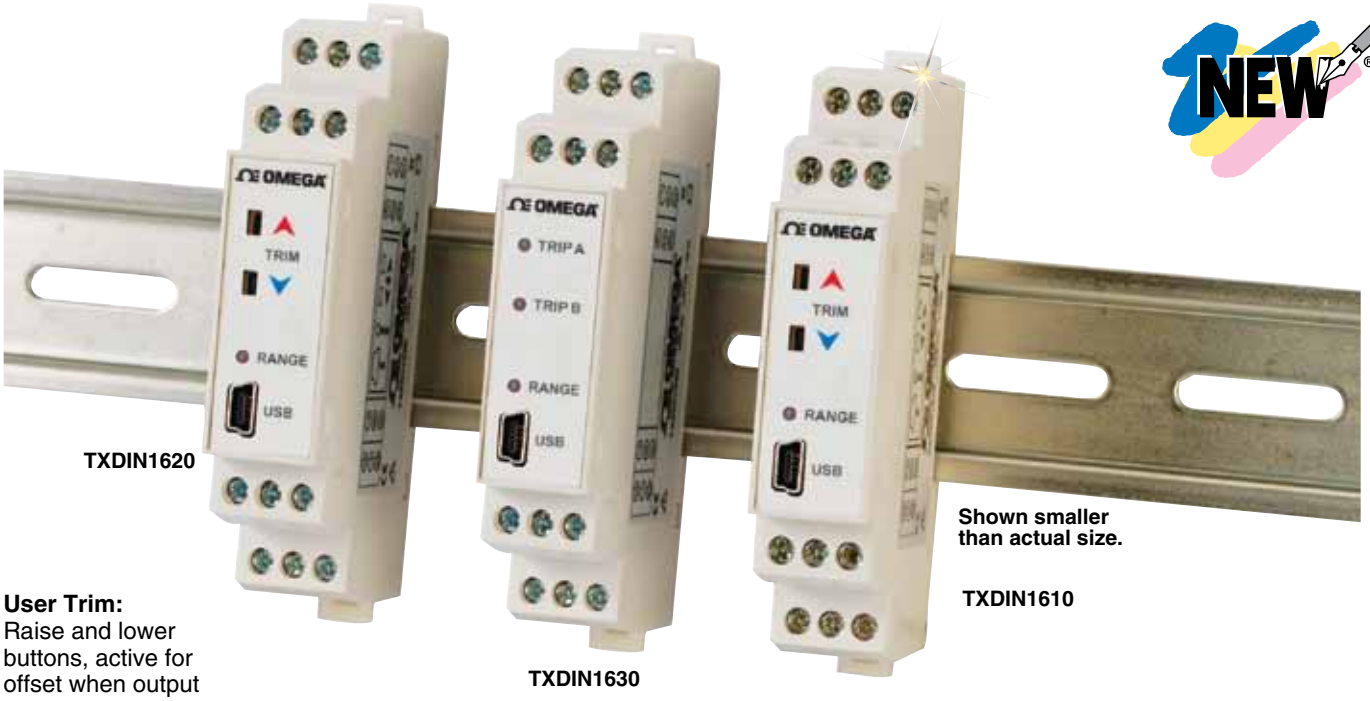
Isolation: Input to output tested at 500 Vdc
Ambient: Operating -20 to 70°C (-4 to 158°F) 10 to 95% RH non-condensing
Storage: -40 to 85°C (-40 to 185°F)
Approvals: CE tested to BS EN 61326
Dimensions: 17.5 W x 56.4 D x 90 mm L (0.7 x 2.2 x 3.5")
Material: Polmide 6.6
Self Extinguishing
Terminals: Screw terminal
Cable: 2.5 mm (0.1") max
Color: Gray

Output

TXDIN1610

Type: 2-wire current sink; signal range 4 to 20 mA; full range 3.8 to 24 mA
Supply: 11 to 30 Vdc, 24V nominal giving max loop load of 600 R @ 24V
Response Time: <500 ms to reach 95% of final value; start up time <3 s
Calibration Accuracy: ±5 uA
Loop Effects: Loop ripple 0.03% of FSR; supply sensitivity 0.05 uA/°C; supply ripple rejection <±5 uA error @ 1V rms 50 Hz ripple
Protection: Reverse connection and over-voltage protection, max over voltage current 100 mA

** Requires USB cable, **OM-62-USB-CABLE**, sold separately, see next page.*



TXDIN1620

TXDIN1630

TXDIN1610

Shown smaller than actual size.

User Trim: Raise and lower buttons, active for offset when output is between 3.8 to 6 mA, span between 18 to 22 mA, trim lock option

TXDIN1620
Type: 3-wire voltage output with programmable ranges: 0 to 10, 0 to 5, 2 to 10, 1 to 5, and 0 to 1V
Supply: 15 to 28 Vdc
Response Time: <500 ms to reach 95% of final value; start up time <3 s
Calibration Accuracy: ±5 mV
Output Drive: 2 mA driving 5 kΩ @ 10V
Protection: Reverse connection and over-voltage protection, max over voltage current 100 mA
User Trim: Raise and lower buttons, active for offset when output is at offset and span, trim lock option

TXDIN1630
Type: Dual form C relay contacts
Supply: 24 Vdc ± 5% @ 40 mA max
Response Time: <500 ms to reach 95% of final value; start up time <3 s
Contact Rating: 250 Vac rms @ 1 A; 30 Vdc @ 1 A resistive load
Trip Type: Individual trips A and B may be set at high or low level, full range setpoint plus adjustable
Ranges: Setpoint programmed on units, covering full range of input
Hysteresis: Set in units
Protection: Reverse connection and over-voltage protection, max over voltage current 100 mA

Inputs

Input	Range	Accuracy*
K	-200 to 1370°C (-328 to 2498°F)	0.1% of FSR ±0.5°C (±0.9°F) [Type T 0.2% FSR ±0.5°C (±0.9°F)]
J	-100 to 1200°C (-148 to 2192°F)	
E	-100 to 1000°C (-148 to 1832°F)	
N	-180 to 1300°C (-292 to 2372°F)	
T	-100 to 400°C (-148 to 752°F)	
R	-10 to 1760°C (14 to 3200°F)	±0.5°C (±0.9°F) ±0.1% of FSR**
S	-10 to 1760°C (14 to 3200°F)	
Pt100	-200 to 850°C (-328 to 1562°F)	±0.1°C (±0.9°F)/±0.05% of rdg
mV	-40 to 75 mV	±0.04 mV
mA	-10 to 25 mA	±0.008 mA

** Accuracy for Pt100 and thermocouple do not include sensor and cold junction errors.*
*** Only over the range 800 to 1600°C (1472 to 2912°F).*

To Order *(Visit omega.com/txdin1600_series for Pricing and Details)*

Model No.	Description
TXDIN1610	Universal DIN rail transmitter
TXDIN1620	Universal DIN rail transmitter with 3-wire isolated voltage output
TXDIN1630	Universal DIN rail trip amplifier
OM-62-USB-CABLE	USB cable for software

Comes complete with operator's manual.
***Ordering Example: TXDIN1610,** universal DIN rail transmitter.*