

HubBus TWO CHANNEL TEMPERATURE TRANSMITTER TYPE HBTX2T

- Two temperature channel inputs
- Temperature sensors galvanic isolated to HubBus system
- **\*** Line powered
- ★ Low power consumption

### DESCRIPTION

The dual channel temperature transmitter is part of a family of DIN rail mounting modules that transmit to and receive from an Austdac HubBus field bus network. The HBTX2T can transmit two separate temperature values on independent HubBus channels.

The two temperature inputs are designed to work with standard two, three or four wire PT100 temperature sensors. Each of the temperature transmitters inputs can be configured to operate on one of two temperature ranges, -10°C to +100°C or -20°C to +200°C. This makes the HBTX2T particularly suited to monitoring bearing or similar plant temperatures via the HubBus network without any requirements for additional power.

To protect the HubBus system form faulty sensors or wiring faults the two temperature sensors are galvanically isolated from the HubBus network.

The transmitter is housed in a compact DIN rail mounting enclosure which complies to DIN 43880. For simplification of wiring a DIN rail communication bus may be used locally with other modules. The DIN rail bus carries power, HubBus signal line and Modbus data.

Maintenance and repair are made easier along with the reduced possibility of wiring faults with the use of pluggable connectors which are available with screw or spring cage terminals and horizontal or vertical wire entry. Maintenance is also improved easy to read LEDs with common layout across the whole module range which shows communication, power, line status and temperature trip at a quick glance in addition to a quick open flip top lid to access the programming port. To minimise line power,



draw some LEDs are only active when external power is used.

Any of the HBTX2T parameters can be conveniently configured using the battery powered handheld HubBus universal programmer and tester type HHP1-H. The two temperature inputs may be programmed to any HubBus channel address. The temperature inputs may also have their over range, hysteresis and digital set point alarm channels configured by the user.

#### CERTIFICATION

- UL61010-1 (Safety) [E471953]
- CAN/CSA-C22.2 No. 61010-1 (Safety) [70189567]
- IEC61000-6-4 (Emissions)
- IEC61000-6-2 (Immunity-Industrial Environments)
- IEC61000-6-7 (Immunity-Functional Safety)
- IEC60068-2-1 & IEC60068-2-2 (Environmental)
- IEC60068-2-6 (Vibration)

Pinout

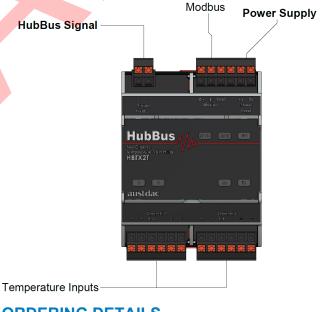
## **SPECIFICATION**

General			
Name	HubBus Two Channel Temperature Transmitter		
Туре	HBTX2T		
Interface			
Bus Channels	Adaptive (up to 2048)		
Bus Speed	Auto configurable		
Bus Connection	Galvanically Isolated		
RS485	Modbus 2 wire (isolated port)		
Configuration	TTL		
Physical			
Dimensions	72 (W) x 63 (D) x 90 (H) mm		
Dimensions	2.8(W) x 2.5(D) x 3.5(H) inches		
Mass	120g / 4.23 ounces		
Mounting	DIN EN 60715 / TS35		
Ingress Protection	IP20		
Environment			
Operating Temperature	-20°C to 50°C / -4°F to 122°F		
Operating relative humidity	10% to 90% Non-condensing		
Electrical			
Power supply voltage	10-48VDC		
Power Load	<10mA		
Status Indicators			
Modbus Activity	2 Front Panel LED		
Controller/Power/Bus Health	1 Front Panel LED each		
Input Alarm/Trip/Fault	2 Front Panel LED		
Temperature Inputs			
Number of Inputs	2		
Sensor Type	2,3 or 4 wire PT100		
Temperature Range	-10°C to 100°C / -20°C to 200°C		
Temperature Input	2,3 o <mark>r 4 w</mark> ire PT100		
Resolution	0.1°C		
Accuracy	±1°C		

НВТХ2Т							
13	Drive		el 1 sngqnH	Signal+	1		
14	+Sense	Channel 1	Bus	Signal-	2		
15	-Sense	Chan					
16	GND						
17	EARTH	EARTH					
18	EARTH		EAF				
19	Drive	Channel 2		A+	7		
20	+Sense		RS485	В-	8		
21	-Sense		185	СОМ	9		
22	GND						
23	EARTH	EARTH	Power	+V	11		
24	EARTH		ver	0V	12		

HUBBEL

### **CONNECTION DIAGRAM**



#### SAFETY DATA

The HBTX2T is not intended for use in safety functions.

The HBTX2T does not provide a safety function, but, as it is on the same bus with other modules which provide safety functions, its failure modes have been assessed.

Additionally, the HBTX2T uses a functional safety certified interface module to interact with the HubBus system.

The configuration of the module must be validated not to interfere with any safety function on the system.

# **ORDERING DETAILS**

DESCRIPTION	ORDER CODE
HubBus TWO CHANNEL TEMPERATURE TRANSMITTER	HBTX2T



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