

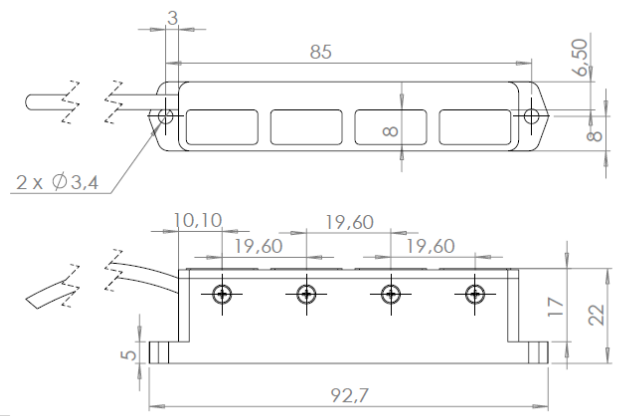
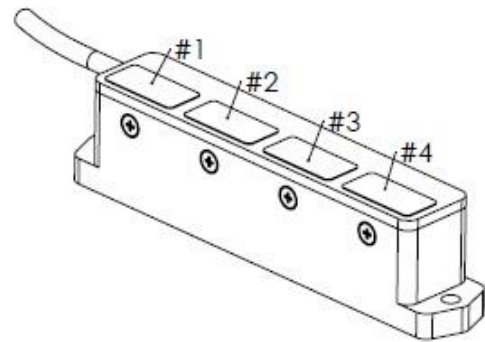
THN4X-C-V2

4 CHANNELS DIGITAL THERMOCOUPLE CONDITIONER, CAN Bus

Texys sensors are designed for data recording. If the user wants to include this sensor in a close loop system or active control, he must assume all responsibility.

Range	-100 min, 1800 max	°C
Type	B, E, J, K, N, R, S, T	
Sampling frequency per channel	10	Hz
Sampling error	0.2	%FS max
Cold junction error	± 0.7	°C
CAN bus	2.0A or B	
CAN bus termination	R=120Ω, Switchable via CAN Bus	
Digital Output	Data Format	2 bytes per cell (signed int)
	Resolution	0.1 °/bit
	Accuracy	±1 °C for FS≤400°C or 0.25%FS for FS>400°C
Supply Voltage	6 to 25	V
Supply Current	< 25	mA
Calibrator	Fluke 714B or 753	
Dimension	92.7x16x22	mm
Material	Aluminum	
Weight	65	g
Protection	IP53	
Vibration test	20Gpp5'	
Shock	500	G
Operating Temp	-40 to +125	°C
Storage Temp	-40 to + 125	°C

Cable		
Type: 5x26AWG FEP tinned copper braided (250V 200°C)		
Length: mm Tubing:		
Connector:		
Pinout		
Colour	Function	Pin
Red	Supply	-
Black	Ground 0V	-
Green	CAN High	-
White	CAN Low	-
Yellow	Do Not Connect	-
Braid		-



Ordering ref:

THN4X-C-V2 - Type/Range

<i>K/-100+400</i>	<i>J/-100+400</i>	<i>T/-100+300</i>
<i>K/-100+800</i>	<i>J/-100+800</i>	<i>T/-100+400</i>
<i>K/-100+1300</i>	<i>J/-50+200</i>	<i>T/-50+200</i>
<i>K/-50+200</i>	<i>J/0+100</i>	<i>T/-40+150</i>
<i>K/-40+150</i>	<i>J/0+1250</i>	<i>T/-20+150</i>
<i>K/-40+300</i>		
<i>K/-40+1370</i>	<i>N/-100+1000</i>	
<i>K/0+120</i>		
<i>K/0+300</i>	<i>B/0+1800</i>	
<i>K/0+800</i>		
<i>K/0+900</i>	<i>R/0+1250</i>	
<i>K/0+1000</i>	<i>R/0+1800</i>	
<i>K/0+1100</i>		
<i>K/0+1250</i>	<i>S/0+1500</i>	

Ex: THN4X-C-V2-K/-50+200 → type K, -50 to +200°C

CAN Data output

- Resolution: 0.1°/bit
- 4 thermocouple temperatures:

Tx1 ID 0x3F0	Byte 0 MSB	Byte 1 LSB	Byte 2 MSB	Byte 3 LSB	Byte 4 MSB	Byte 5 LSB	Byte 6 MSB	Byte 7 LSB
	Temperature #1		Temperature #2		Temperature #3		Temperature #4	

- 2 ambient temperatures (if “Tx2 frame enable” = 1):

Tx2 ID 0x3F4	Byte 0 MSB	Byte 1 LSB	Byte 2 MSB	Byte 3 LSB
	Ambient #1		Ambient #2	

Changing parameters

Must be setup according to Texense’s CAN protocol, or by using the Texense Android Smart Tool (tAST®) with your android device. Contact us at info@texense.com

CAN parameters:

Address	Parameter	Raw values	values	Comments
0x00	Baudrate	0x00	CAN2.0A 1Mbps	Default
		0x01	CAN2.0A 500 Kbps	
		0x02	CAN2.0A 250 Kbps	
		0x03	CAN2.0A 125 Kbps	
		0x10	CAN2.0B 1Mbps	
		0x11	CAN2.0B 500 Kbps	
		0x12	CAN2.0B 250 Kbps	
0x01	Emission frequency	0x00	Rx frame trig	Triggering mode - 10Hz max.
		0x01	1 Hz	
		0x02	10 Hz	Default
0x02	RxTrig frame ID	if CAN2.0A: 0x1 to 0x7F0		MSB
0x03		if CAN2.0B: 0x1 to 0xFFFF (except 0x7F1 to 0x7F3)		LSB
0x04	Tx1 frame ID	if CAN2.0A: 0x1 to 0x7F0		MSB
0x05		if CAN2.0B: 0x1 to 0xFFFF (except 0x7F1 to 0x7F3)		LSB
0x06	Tx2 frame ID if “Tx2 frame enable”	if CAN2.0A: 0x1 to 0x7F0		MSB
0x07		if CAN2.0B: 0x1 to 0xFFFF (except 0x7F1 to 0x7F3)		LSB
0x08	Don't care (may be changed without consequence)			
0x09				
0x0A	Degree	0	Fahrenheit	Default
		1	Celsius	
0x0B	CAN Bus Termination Resistor	0	Not connected	Default
		1	Connected	
0x0C	Tx2 frame Enable	0	Disable	Default
		1	Enable	This frame is sent at 1Hz

For complete information, contact us at info@texense.com