IB3-CAN

3 axis accelerometer with CAN output

IB3-CAN-XY##-Z## SN: B########

Texense sensors are designed for data logging. Should the users want to include this sensor in a closed loop system, they must undertake total responsibility from doing so.

Accelerometer X and Y axis features (Gas technology)		
Available Ranges	±2, ±5 or ±10	G
Accuracy	±2	%FS
Sensitivity	1000 to 200 ±2%	mV/G
Bandwidth (@ -3dB)	DC to 20 ±15%	Hz
Signal at 0G	2.500 ±0.020	V
Offset Drift (20 to 80°C)	±20	mV
Gain Drift (20 to 80°C)	±1.5	%
Cross axis sensitivity	4	%
Accelerometer Z axis features (Capacitive technology)		
Available Ranges	±2, ±5, ±10, ±20, ±50	G
Accuracy	±2	%FS
Sensitivity	1000 to 40 ±8%	mV/G
Bandwidth (@ -3dB)	DC to 20 ±15%	Hz
Z signal at 0G	2.500 ±0.1	V
Offset Drift (20 to 80°C)	±20	mV
Gain Drift (20 to 80°C)	±1.5	%
Cross axis sensitivity	4	%
Electrical features		
Supply Voltage	9 to 30	V
Supply Current	60	mA
Mechanical features		
Dimensions	29.5 x 23.5 x 20.5	mm
Material	Aluminum	
Weight	30	g
Protection	IP66	
Environment		
Vibration test	20Gpp 5'	
Shock	1000	G
Operating Temp	-20 to +100	°C
Storage Temp	-40 to +125	°C

Date	##/##/####	Operator	
Order			
Customer			
Product Ref	IB3-CAN-XY##-Z##		
SW version	Acc Gas board	V#.##	
	CAN interface board	V#.##	

Accelerometer Sensor Readings			
	X	Y	Z
Signal (V) @ -1G			
Signal(V) @ 0G			
Signal (V) @ +1G			
Sensitivity (mV/G)			
Cut off freq. (Hz) -3dB			
Cross axis (%)			

Setup parameters		
CAN	2.0A ~~2.0B~~	-
CAN termination resistor	☐yes ☑no	-
Baudrate	1M	bps
Frequency	100	Hz
Rx trig ID	7F0	Hex
Tx1 ID	3F0	Hex
Tx2 ID	3F4	Hex
Output format	mV	-

Cable		
5x 26 AWG FEP tinned copper braided cable 250V 200°C Length: 1000mm Tubing: 50mm Connector: on request		
Color	**Function**	**Pin**
Red	Supply	
Black	0V	
White	CAN Low	
Green	CAN High	
Yellow	Do not connect	
Braid	Not connected	

CAN Data output

Frame #1 (default Tx Frame ID: 0x03F0)

ID	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
0x03F0	ACC X MSB	ACC X LSB	ACC Y MSB	ACC Y LSB	ACC Z MSB	ACC Z LSB	Not used	Not used

Output format	1mV	16bits
Offset	2500	32768
Sensitivity	1mv/bit	0,0763mV/bit

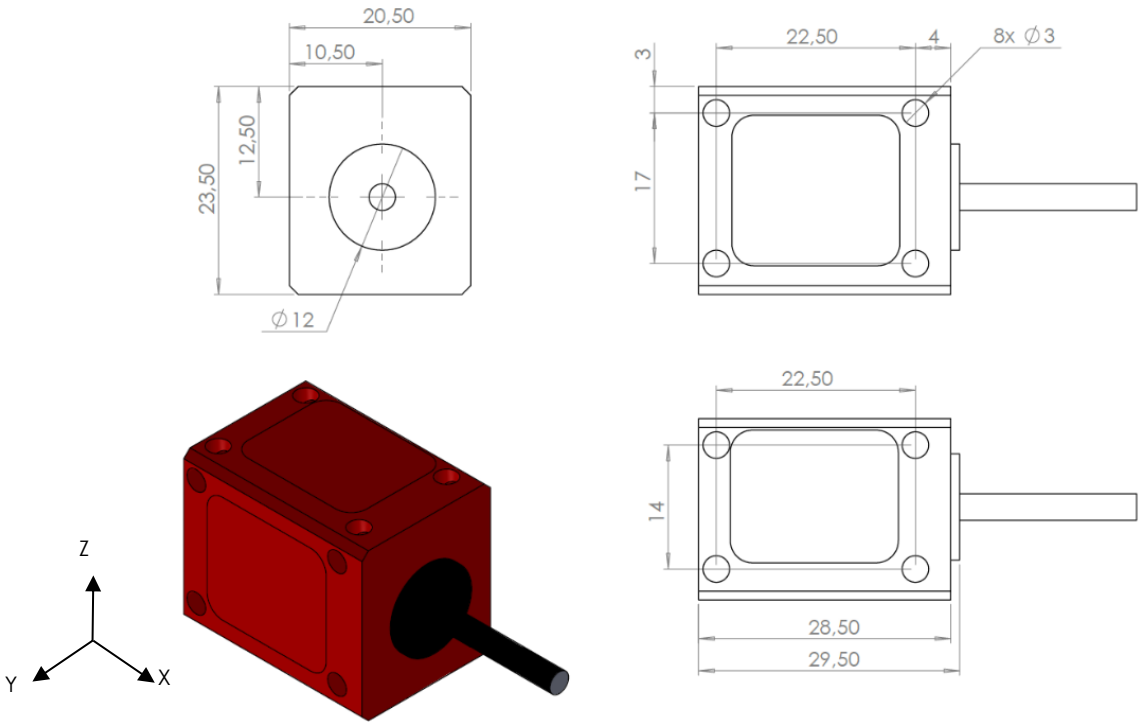
Changing parameters

Must be setup according to Texense CAN protocol, or by using the tWist® software (texense Windows software tool) with the tSIB (texense Smart Interface Box).

Address	Parameter	Raw values	Values	Comments	
0x00	Baudrate & Type A or B (11 or 29bits ID)	0x00	CAN2.0**A** 1Mbps	Default	
		0x01	CAN2.0**A** 500 Kbps		
		0x02	CAN2.0**A** 250 Kbps		
		0x03	CAN2.0**A** 125 Kbps		
		0x10	CAN2.0**B** 1Mbps		
		0x11	CAN2.0**B** 500 Kbps		
		0x12	CAN2.0**B** 250 Kbps		
		0x13	CAN2.0**B** 125 Kbps		
0x01	Emission frequency	0x00	Rx frame trig	Request mode - 100Hz max	
		0x01	1 Hz		
		0x02	5 Hz		
		0x03	10 Hz		
		0x04	50 Hz		
		0x05	100 Hz	Default	
		0x06	200 Hz		
		0x07	500 Hz	Only with baudrate 1Mbps	
0x02	Rx frame ID	if CAN2.0A: 0 to 0x07F0 if CAN2.0B: 0 to 0xFFFF		MSB	Default: 0x07F0
0x03				LSB	
0x04	Tx1 frame ID	if CAN2.0A: 0 to 0x07F0 if CAN2.0B: 0 to 0xFFFF		MSB	Default: 0x03F0
0x05				LSB	
0x06	Tx2 frame ID	if CAN2.0A: 0 to 0x07F0 if CAN2.0B: 0 to 0xFFFF		MSB	Default: 0x03F4
0x07				LSB	
0x08	CAN termination resistor	0	Not connected		Default: 0
		1	Connected		
0x09	Output format	0	16bits		Default: 1
		1	mV		

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

Mechanical drawing



Ordering information

Ordering ref:

IB3-CAN - XY*Range* – Z*Range*

XY*Range*	Z*Range*
2: Range ±2G	*2:* Range ±2G
5: Range ±5G	*5:* Range ±5G
10: Range ±10G	*10:* Range ±10G
	20: Range ±20G
	50: Range ±50G

ex : IB3-CAN-XY5-Z20