

IB3G-CAN

3 AXIS Gas Accelerometer with CAN output
Ref:

SN: _____ **Software version:** _____

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.

CAN bus	2.0A or 2.0B	
CAN termination resistor	Switchable, 120Ω	
Baud rate	125k to 1Mbps	
Parameters	identifiers, baudrate, frequency, analog parameters.	
Output Frequency	1Hz to 500Hz**, request mode.	
Output Data	16 bits per channel	
Output format	16bits or mV	
Supply Voltage	6 to 16	V
Typical Supply Current	60	mA
Dimensions	29.5x23.5x20.5 mm	
Material	Aluminum	
Weight	30	g
Protection	IP66	
Vibration test	20Gpp 5'	
Operating Temp	-20 to +100	°C
Storage Temp	-40 to +125	°C

Accelerometer gas		
Range	±1, ±2, ±5, ±10	G
Accuracy	±2	%FS
Sensitivity	2000 to 200 ±2%	mV/G
Bandwidth 3dB	DC to 20 ±15%	Hz
signal at 0G	2500 ±5	mV
Offset Drift (20 to 80°C)	±20	mV
Gain Drift (20 to 80°C)	±1,5	%
Cross axis sensitivity	4	%

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

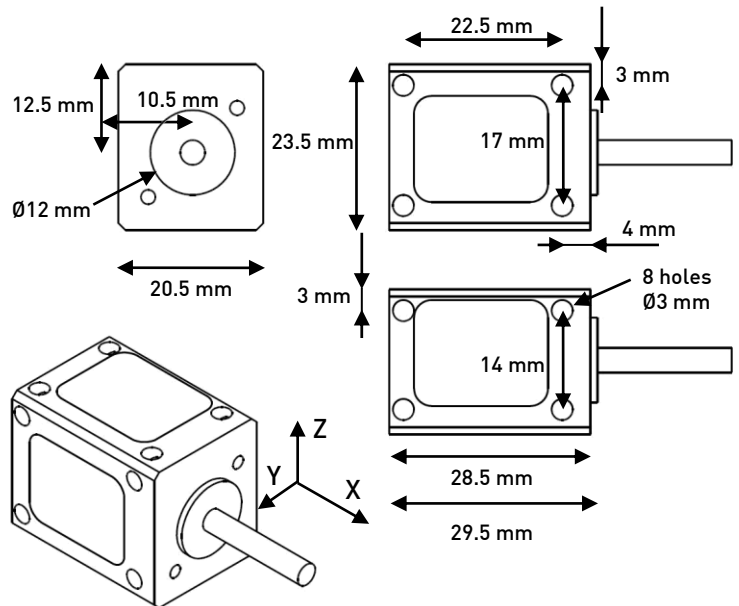
Setup parameters			
CAN	2.0A	2.0B	-
CAN termination resistor	<input type="checkbox"/> yes <input type="checkbox"/> no		-
Baudrate			bps
Frequency			Hz
Rx trig ID			Hex
Tx1 ID			Hex
Tx2 ID			Hex
Output format	16bits		-
Anti-aliasing filter cut off frequency			Hz

Cable : 4x26AWG FEP Tinned copper braided cable 250V 200°C

Length : _____ mm Tubing: _____

Connector : _____

Colour	Function	Pin
Red	Supply	
Black	0V	
White	CAN LOW	
Green	CAN HIGHT	
Yellow	ONE WIRE	
Braid	Not connected	



Data output

Frame #1

default Tx1 Frame ID: 0x03F0 / 16 bit resolution 1mV/bit offset 2500

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	-	-

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:

N°	Parameter	Raw values	values	Comments
0x00	Baudrate & A or B (11 or 29bits ID)	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	Request mode - 100Hz max
		0x01	1 Hz	
		0x02	5 Hz	
		0x03	10 Hz	default
		0x04	50 Hz	
		0x05	100 Hz	
		0x06	200 Hz	
0x07	500 Hz**	Only with baudrate 1Mbps		
0x02	Rx frame ID	if CAN2.0A: 0 to 0x07F0		MSB
0x03		if CAN2.0B: 0 to 0xFFFF		LSB
0x04	Tx1 frame ID	if CAN2.0A: 0 to 0x07F0		MSB
0x05		if CAN2.0B: 0 to 0xFFFF		LSB
0x06	Tx2 frame ID	if CAN2.0A: 0 to 0x07F0		MSB
0x07		if CAN2.0B: 0 to 0xFFFF		LSB
0x08	CAN termination resistor	0	Not connected	Default: 0
		1	Connected	

Analog parameters:

0x09	Output format	0	16bits	Default: 1
		1	mV	

Ordering ref ex: IB3G-CAN-XY10-Z10

IB3G-CAN-XYRange-ZRange

Range			
Acc XY	±3g	±5g	±10g
Acc Z	±3g	±5g	±10g

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