

IB6

3 axis accelerometer and 3 axis gyroscope

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.

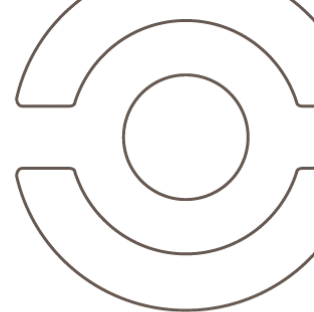
Accelerometer X and Y axis features (Gas technology)		
Available Ranges	$\pm 3, \pm 5$	G
Accuracy	± 2	%FS
Sensitivity	666 to 400 $\pm 2\%$	mV/G
Bandwidth (@ -3dB)	DC to 20 $\pm 15\%$	Hz
Signal at 0G	2.500 ± 0.05	V
Offset Drift (20 to 80°C)	± 20	mV
Gain Drift (20 to 80°C)	± 1.5	%
Cross axis sensitivity	4	%
Accelerometer Z axis features (Capacitive technology)		
Available Ranges	$\pm 3, \pm 5, \pm 10, \pm 15, \pm 20$	G
Accuracy	± 1.5	%FS
Sensitivity	666 to 100 $\pm 8\%$	mV/G
Standard bandwidth (@ -3dB)	DC to 65	Hz
Max bandwidth on request (@ -3dB)	DC to 700	Hz
Z signal at 0G	2.500 ± 0.050	V
Offset Drift (20 to 80°C)	± 20	mV
Gain Drift (20 to 80°C)	± 1	%
Cross axis sensitivity	2.5	%
Gyroscope		
Range	$\pm 50, \pm 100, \pm 150$	°/s
Accuracy	± 2	%FS
Sensitivity	40, 20, 13.3	mV/°/s
Cut off frequency 1st order	50	Hz
signal at 0°/sec	2.500 ± 0.100	V
Offset drift (20 to 80°C)	± 25	mV
Gain Drift (20 to 80°C)	± 1	%
Electrical features		
Supply Voltage	6 to 16	V
Supply Current	28	mA
Output Voltage	0-5	V
Output Impedance	47	Ω
Mechanical features		
Housing Dim	36x26.5x25.5	mm
Material	Aluminum	
Weight	60	g
Protection	IP66	
Environment		
Vibration test	20Gpp 5'	
Shock	500	G
Operating Temp	-20 to +85	°C
Storage Temp	-40 to +125	°C

Date	##/##/####	Operator	
Order			
Customer			
Product Ref	IB6-XY#-Z##-GX###-GY###-GZ###		
SW version (ACC Gas board)	V#.#		

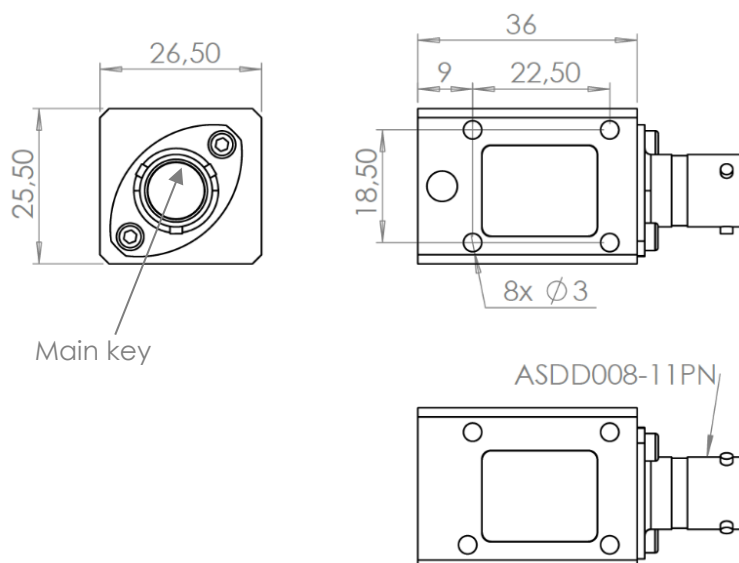
Accelerometer Sensor Readings			
	X	Y	Z
Signal (V) @ -1G	...	...	...
Signal (V) @ 0G	...	...	...
Signal (V) @ +1G	...	...	...
Sensitivity (mV/G)	...	...	...
Cut off freq. (Hz) -3dB	...	...	...
Cross axis (%)	...	...	...
Gyroscope Sensor Readings			
	0°/s	mV/°/s	
X	...	...	
Y	...	...	
Z	...	...	

Acc. Calibration table						Gyro. Calibration table			
g	3G 666mV/g	5G 400 mV/g	10G 200 mV/g	15G 133mV/g	20G 100mV/g	°/s	$\pm 50^\circ/s$ 40mV/°/s	$\pm 100^\circ/s$ 20mV/°/s	$\pm 150^\circ/s$ 13.3mV/°/s
-20					0.500				
-15				0.500	1.000	-150			0.500
-10			0.500	1.167	1.500	-100		0.500	1.167
-5		0.500	1.500	1.833	2.000	-50	0.500	1.500	1.833
-3	0.500	1.300	1.900	2.100	2.200	-25	1.500	2.000	2.167
0	2.500	2.500	2.500	2.500	2.500	0	2.500	2.500	2.500
3	4.500	3.700	3.100	2.900	2.800	25	3.500	3.000	2.833
5		4.500	3.500	3.167	3.000	50	4.500	3.500	3.167
10			4.500	3.833	3.500	100		4.500	3.833
15				4.500	4.000	150			4.500
20					4.500				

 Out of Range



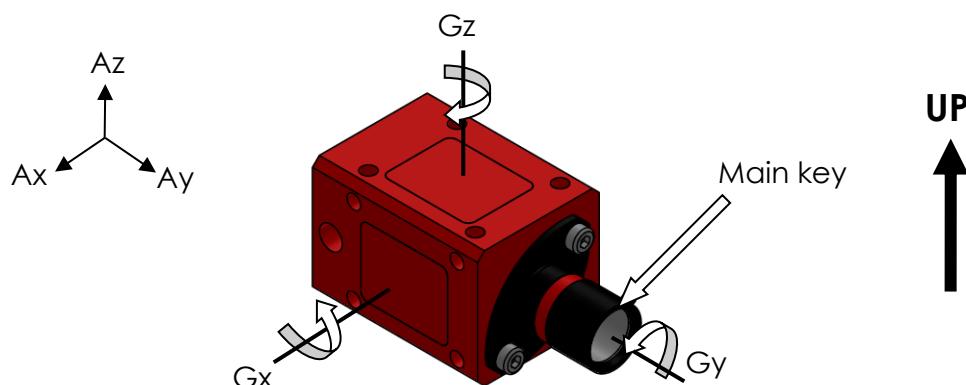
Mechanical drawing



Pinout

Pinout	
Connector: ASDD008-11PN	
Mating connector: ASDD608-11SN	
Pin	Function
1	Supply Acc
2	0V Acc
3	Signal X Acc
4	Signal Y Acc
5	Signal Z Acc
6	Supply Gyro
7	0V Gyro
8	Signal X Gyro
9	Signal Y Gyro
10	Signal Z Gyro
11	Not connected

Axis definition



Ordering information

Ordering ref:	
IB6 – XYRange – ZRange – GXRange – GYRange – GZRange	
3: Range $\pm 3G$ 5: Range $\pm 5G$	50: Range $\pm 50^\circ/s$ 100: Range $\pm 100^\circ/s$ 150: Range $\pm 150^\circ/s$
3: Range $\pm 3G$ 5: Range $\pm 5G$ 10: Range $\pm 10G$ 15: Range $\pm 15G$ 20: Range $\pm 20G$	
ex: IB6-XY5-Z15-GX150-GY50-GZ150	