



# AC-CAP3-2

3 axis capacitive accelerometer 2G range

SN: A#####

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.

Measurement features		
Range	±2	G
Sensitivity	1000 ± 2%	mV/G
Sensitivity Drift (20 to 80°C)	±2.5	%
Signal at 0G	2.500 ± 0.050	V
Offset Drift (20 to 80°C)	±30	mV
Cut-off frequency -3dB (±10%)	Min	10
	Default	65
	Max <sup>(1)</sup>	500
Calibrator	LDS V406	
Resonance	5000	Hz
Typical Cross axis sensitivity	3	%
Electrical features		
Supply Voltage <sup>(2)</sup>	5 to 16	V
Supply Current	< 3	mA
Output Voltage	0 – 5	V
Output Impedance	< 10	Ω
Max output Load	5000	Ω
Mechanical features		
Dimensions	25x16x8	mm
Material	Aluminium	
Weight (without cable)	7	g
Protection	IP66	
Environment		
Shock	1000	G
Insulation under 50V <sub>bc</sub>	>55	MΩ
Operating Temp	-20 to +100	°C
Storage Temp	-40 to +125	°C

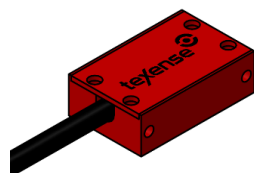
Date		Operator	
Order			
Customer			
Product Ref	AC-CAP3-2-###		

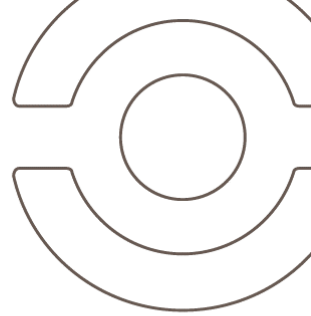
Sensor readings			
	X	Y	Z
Signal (V) @ -1G	...V	...V	...V
Signal (V) @ 0G	...V	...V	...V
Signal (V) @ +1G	...V	...V	...V
Sensitivity (mV/G)	...mV/G	...mV/G	...mV/G
Cut off frequency (Hz) at -3 dB	...Hz	...Hz	...Hz
Cross Axis (%)	...%	...%	...%

Cable		
5x26 AWG FEP tinned copper braided cable 250V 200°C		
Length: 1000mm Tubing:		
Connector: on request		
Color	Function	Pin
Red	Supply	-
Black	0V	-
White	Signal X	-
Green	Signal Y	-
Yellow	Signal Z	-
Braid	Connected to case	

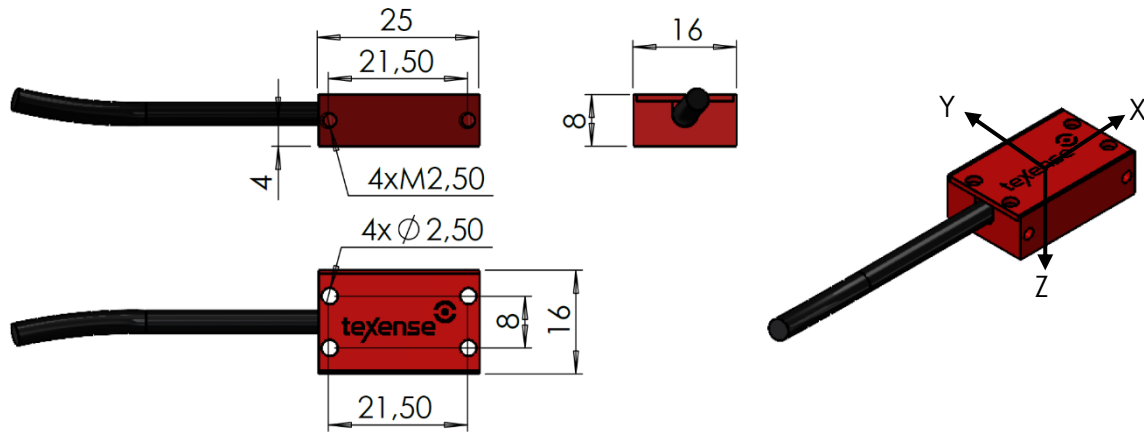
Standard calibration table	
Acceleration (G)	Output (1000mV/G)
-2.0	0.500
-1.5	1.000
-1.0	1.500
-0.5	2.000
0.0	2.500
0.5	3.000
1.0	3.500
1.5	4.000
2.0	4.500

- (1) On X and Y axis only, it is possible to go up to 700Hz on request.
- (2) At 5V supply voltage, the outputs are saturated to 4.650V. Accuracy features are not impacted in the operating range.





## Mechanical drawing



## Example of Texense inertial units installation



The mounting holes enable to build a compact custom inertial system, mixing accelerometers and gyroscopes.

## Ordering information

**Ordering ref:**

AC-CAP3 – Range – Cut off frequency

2: Range ±2G	Cut off frequency -3dB in Hz
	10: 10Hz (min)
	...
	65: 65Hz (default)
	...
	500: 500Hz (max)

ex: AC-CAP3-2-65