

AC-CAP1-Z

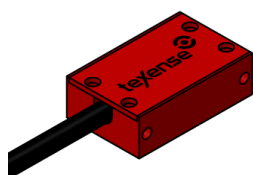
1 vertical axis capacitive accelerometer 5 to 20G range

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		
Available ranges	±5, ±10, ±15, ±20	G
Sensitivity	400 to 100 ±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	500
Calibrator	LDS V406	
Resonance	5000	Hz
Typical Cross axis sensitivity	3	%
Electrical features		
Supply Voltage ⁽¹⁾	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 _{DC}	>55	MΩ
Operating Temp	-20 to +100	°C
Storage Temp	-40 to +125	°C

(1) At 5V supply voltage, the outputs are saturated to 4.650V. Accuracy features are not impacted in the operating range.

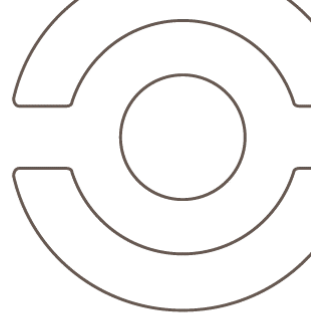


Date		Operator	
Order			
Customer			
Product Ref	AC-CAP1-Z-##-###		

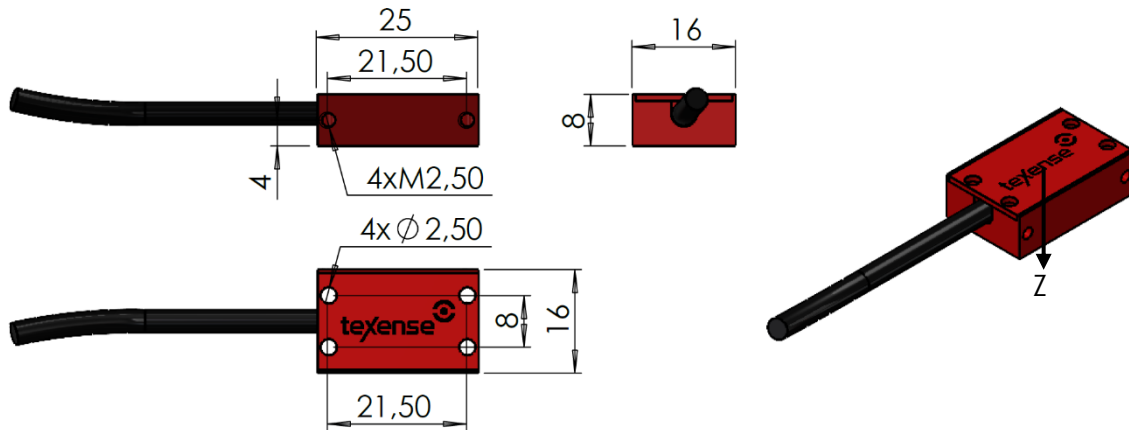
Sensor readings	
Axis	Z
Signal @ -1G	...V
Signal @ 0G	...V
Signal @ +1G	...V
Sensitivity	...mV/G
Cut off frequency at -3 dB	...Hz
Cross Axis	...%

Cable		
<input checked="" type="checkbox"/> 3x26AWG FEP tinned copper braided cable 250V 200°C <input type="checkbox"/> EPD 117723A Length: 1000mm Tubing : Connector: on request		
Color	Function	Pin
Red	Supply	-
Black	0V	-
White or yellow	Signal	-
Braid (not for EPD117723A)	Not connected	

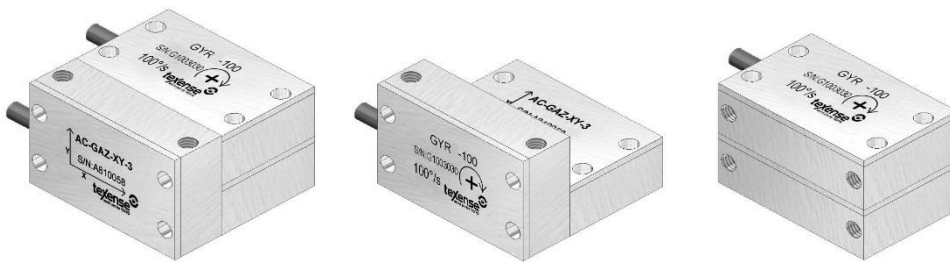
Calibration table				
	5G 400 mV/G	10G 200 mV/G	15G 133mV/G	20G 100mV/G
-20				0.500
-15			0.500	1.000
-10		0.500	1.167	1.500
-5	0.500	1.500	1.833	2.000
0	2.500	2.500	2.500	2.500
+5	4.500	3.500	3.167	3.000
+10		4.500	3.833	3.500
+15			4.500	4.000
+20				4.500



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:	
<i>AC-CAP1-ZRange - Cut off frequency</i>	
5: Range $\pm 5G$	Cut off frequency -3dB in Hz
10: Range $\pm 10G$	10: 10Hz (min)
15: Range $\pm 15G$...
20: Range $\pm 20G$	65: 65Hz (default)
	...
	500: 500Hz (max)
ex: AC-CAP1-Z5-65	