

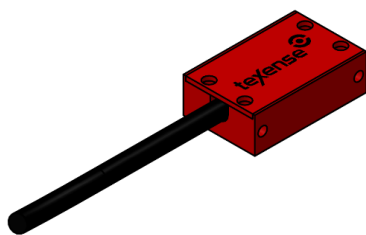
AC-CAP1-50

1 axis capacitive accelerometer 50G

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	±50	G
Sensitivity	40 ± 8%	mV/G
Sensitivity drift	20°C to 80°C	±2.5
	20°C to 125°C	±4
Signal at 0G	2.500 ± 0.040	V
Offset drift	20°C to 80°C	±20
	20°C to 125°C	±30
Cut-off frequency -3dB (±10%)	Min	40
	Default	270
	Max	400
Calibrator	LDS V406	
Resonance	24	kHz
Max Cross axis sensitivity	3	%
Electrical features		
Supply Voltage	5.5 to 16	V
Supply Current	< 3	mA
Output Voltage	0 – 5	V
Output Impedance	< 10	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 +125	°C
Storage Temp	-40 to +125	°C

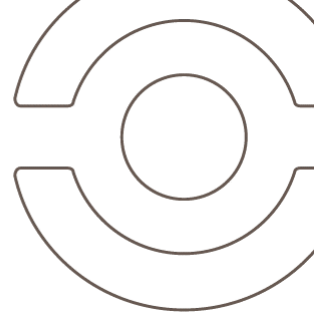


Date		Operator	
Customer			
Order			
Product Ref	AC-CAP1-#50-###		

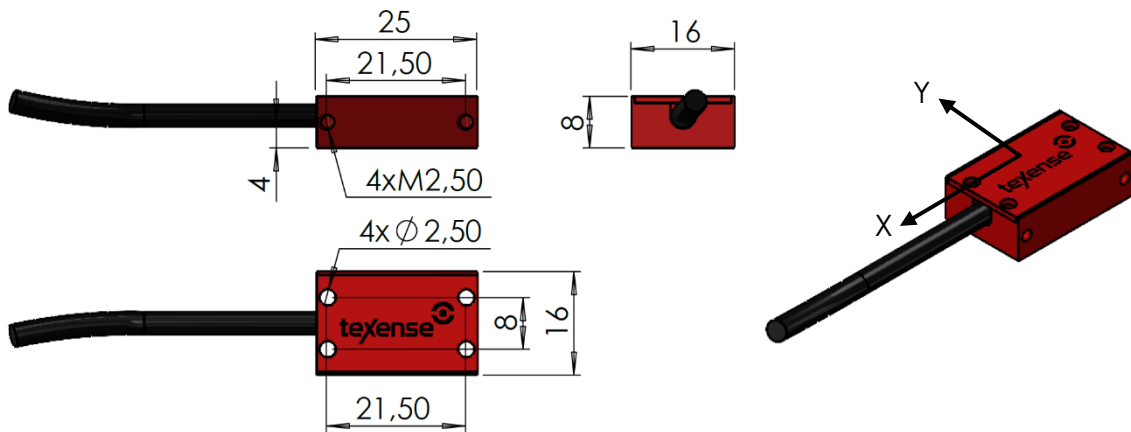
Sensor readings	
Axis	
Signal @ -1G	...V
Signal @ 0G	...V
Signal @ +1G	...V
Sensitivity	...mV/G
Cut off frequency at -3 dB	...Hz
Cross Axis	...%

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

Standard calibration table	
Acceleration (G)	Output signal (V)
-50	0.500
-40	0.900
-30	1.300
-20	1.700
-10	2.100
0	2.500
+10	2.900
+20	3.300
+30	3.700
+40	4.100
+50	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:

AC-CAP1 – Axis Range – Cut off frequency

<p>X: X axis considered (Y not wired) Y: Y axis considered (X not wired)</p>	<p>50: Range $\pm 50G$</p>	<p>Cut off frequency -3dB in Hz 40: 40Hz (min) ... 270: 270Hz (default) ... 400: 400Hz (max)</p>
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ex: AC-CAP1-Y50-270:

- Y axis range $\pm 50G$
- 270Hz cut-off frequency at -3dB