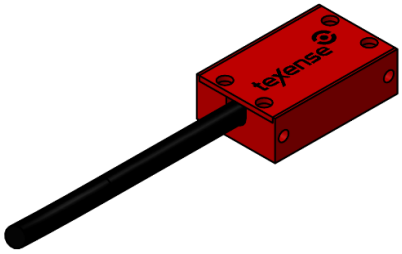
AC-CAP1

1 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 ±8%	mV/G
Sensitivity Drift (20 to 80°C)		±1	%
Signal at 0G		2.500 ± 0.100	V
Offset Drift (20 to 80°C)		±20	mV
Cut-off frequency -3dB (±10%)	Min	10	Hz
	Default	65	
	Max	700	
Calibrator		LDS V406	
Resonance		5000	Hz
Typical Cross axis sensitivity		2.5	%
Electrical features			
Supply Voltage		6 to 28	V
Supply Current		< 3	mA
Output Voltage		0 – 5	V
Output Impedance		47	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



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

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

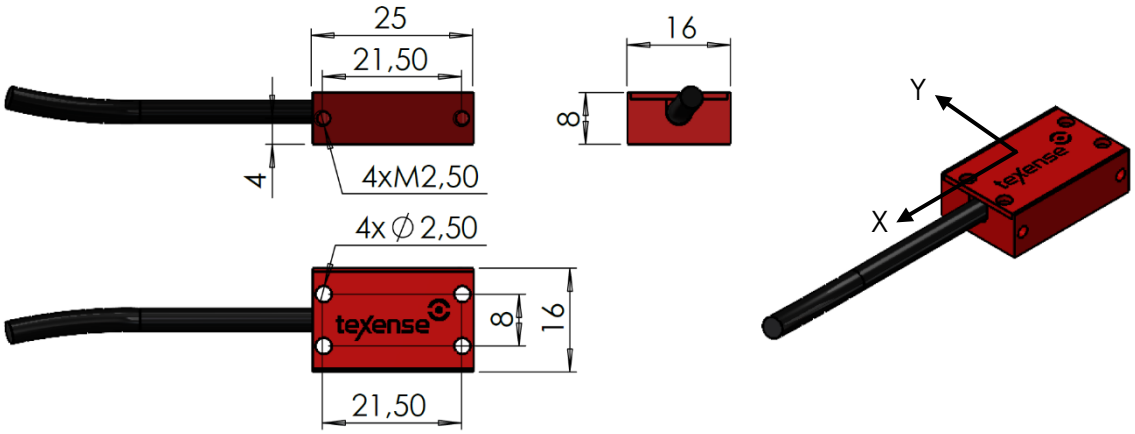
Cable

☒ 3x26AWG FEP tinned copper braided cable 250V 200°C
☐ EPD 117723A
Length: 1000mm Tubing :
Connector: on request

Color	Function	Pin
Red	Supply	-
Black	0V	-
White or yellow	Signal	-
Braid (not for EPD117723A)	Connected to case	

Standard 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:

AC-CAP1 – *Axis Range* – *Cut off frequency*

X: X axis considered (Y not wired)
Y: Y axis considered (X not wired)

5: Range ±5G
10: Range ±10G
15: Range ±15G
20: Range ±20G

Cut off frequency -3dB in Hz
10: 10Hz (min)
…
65: 65Hz (default)
…
700: 700Hz (max)

ex: AC-CAP1-Y5-65:

- Y axis range ±5G
- 65Hz cut-off frequency at -3dB