



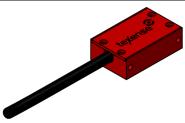
## AC-CAP1-30

1 axis capacitive accelerometer 30G 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                              |      | ±30           | G    |     |  |
| Sensitivity                        |      | 66.7 ± 8%     | mV/G |     |  |
| Sensitivity<br>Drift               | 20   | 0°C to 80°C   | ±2.5 | 0/  |  |
|                                    | 20   | °C to 125°C   | ±4   | %   |  |
| Signal at 0G                       |      | 2.500 ± 0.100 | V    |     |  |
| Offset Drift                       | 20   | 0°C to 80°C   | ±30  | mV  |  |
|                                    | 20   | °C to 125°C   | ±50  |     |  |
| Cut-off frequen                    | су   | Min           | 40   |     |  |
| -3dB                               |      | Default       | 270  | Hz  |  |
| (±10%)                             |      | Max           | 400  |     |  |
| Calibrator                         |      | LDS V406      |      |     |  |
| Resonance                          |      | :e            | 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                   |      | 47            | Ω    |     |  |
| Mechanical features                |      |               |      |     |  |
| Dimensions                         |      | 25x16x8       | mm   |     |  |
| Material                           |      | Aluminium     |      |     |  |
| Weight (without cable)             |      |               | 7    | g   |  |
| Prote                              | ctio |               | IP66 |     |  |
| Environment                        |      |               |      |     |  |
| Shock                              |      | 1000          | G    |     |  |
| Insulation under 50V <sub>DC</sub> |      | >55           | ΜΩ   |     |  |
| Operating Temp                     |      | -20 to +125   | °C   |     |  |
| Storage Temp                       |      | -40 to +125   | °C   |     |  |



| Date        | Operator        |
|-------------|-----------------|
| Order       |                 |
| Customer    |                 |
| Product Ref | AC-CAP1-#30-### |

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

| Cable   |          |         |  |  |  |
|---|----------|---------|--|--|--|
| ☑ 3x26AWG FEP tinned copper braided cable 250V 200°C<br>□ FPD 117723A |          |         |  |  |  |
| Length: 1000mm Tubing: Connector: on request                          |          |         |  |  |  |
| Color   | Function | Pin     |  |  |  |
| Red   | Supply   | -       |  |  |  |
| Black   | 0V       | -       |  |  |  |
| White or yellow   | Signal   | -       |  |  |  |
| Braid (not for EPD117723A)  | Not co   | nnected |  |  |  |

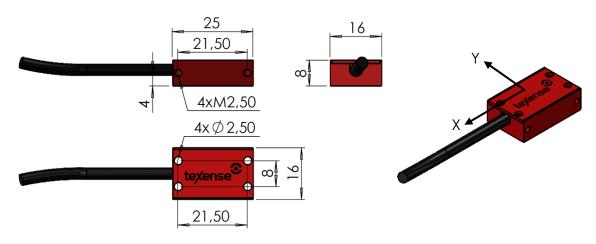
| Standard calibration table |               |  |  |
|----------------------------|---------------|--|--|
| Acceleration               | Output signal |  |  |
| (G)                        | (V)           |  |  |
| -30                        | 0.500         |  |  |
| -20                        | 1.167         |  |  |
| -10                        | 1.834         |  |  |
| 0                          | 2.500         |  |  |
| +10                        | 3.167         |  |  |
| +20                        | 3.834         |  |  |
| +30                        | 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**

