

## Accelerometer ACT-010

- 3-Axis Piezo-resistive accelerometer, Range $\pm 10g$ ;
- Very low consumption $<2mA$ ;
- Very low noise $<100\mu g/\sqrt{Hz}$ ;
- Frequency response $\geq 500Hz$  (5%);
- Anti-Shock $\geq 2000g$ .



ACT-010, based on MEMS, is 3-axis accelerometer with very low noise. The sensor can real very high measurement repeatability. The principle includes an internal LDO to get stable accuracy voltage, which also reduces the sensor power supply. A 1.5kHz (50%) low pass filter is integrated to refine the signal output. The sensor includes wear-resisting cable with default length 8m. The LEMO connector and Dallas ID are optional.

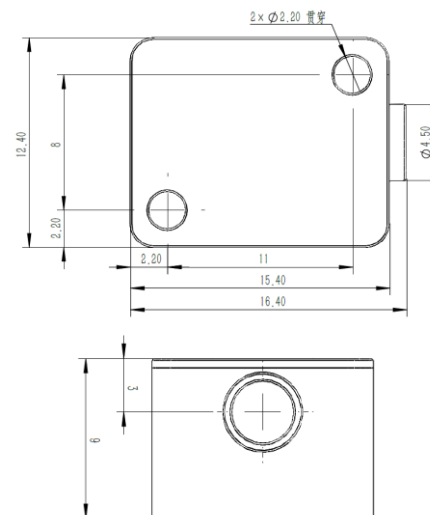
### Technical Specification (5V, 25 °C):

| Name                   | Unit              | Value                         |
|------------------------|-------------------|-------------------------------|
| Range                  | g                 | $\pm 10$                      |
| Excitation Voltage     | V                 | 5                             |
| Offset                 | mV                | $< \pm 50$                    |
| Sensitivity            | mV/g              | 80                            |
| Frequency Response     | Hz                | 500 (5%)                      |
| Non-Linearity          | %FS               | $\leq \pm 0.2$                |
| Transverse Sensitivity | %                 | $\leq 1$                      |
| Noise Density          | $\mu g/\sqrt{Hz}$ | $< 100$                       |
| Current                | mA                | $< 2$                         |
| Thermal Sens. Shift    | %/°C              | $\pm 0.01$                    |
| Power on time          | ms                | $< 10$                        |
| Anti-Shock             | g                 | $> 2000$                      |
| Output Impedance       | k $\Omega$        | 30                            |
| Isolation Resistance   | M $\Omega$        | $> 100$                       |
| Operation Temperature  | °C                | -40~120                       |
| Case Materials         | /                 | Al. Alloy                     |
| Wight (without cable)  | grams             | 3.5                           |
| Dimension              | mm                | 16.4 $\times$ 12.4 $\times$ 9 |

Cable and Connector can be as required.

Mounting Screws and Flat Washers are included.

### Dimension:



### Wire Define:

|                  |                     |
|------------------|---------------------|
| Red              | Excitation+         |
| Black/Gray/Brown | Excitation-         |
| Blue             | Signal Y+           |
| White            | Signal X+           |
| Yellow           | Singal Z+           |
| Purple           | Signal Temperature+ |
| Green            | Not Connect         |
| Orange           | Signal-             |
| Shield           | Connector Case      |