

Features:

- Digital Interface USB
- MEMS Capacitive
- Triaxial
- Resolution: 4 μ g
- Sample Rate for USB: 125, 500, 1000 SPS
- Measurement Range: $\pm 10g$, $\pm 20g$, $\pm 40g$ for 40g
- Measurement Range: $\pm 2g$, $\pm 4g$, $\pm 8g$ for 8g
- Frequency Range ($\pm 5\%$): DC to 1000 Hz
- Temperature Measurement



Software Features:

- Display and Record: X, Y, Z Acceleration, Temperature
- Analyze: FFT, Downsample, Average
- Calibration: Linear Equation
- Export: .CSV, .MAT, .TXT and .PNG

Capacitive accelerometers are based on proven micro-electro-mechanical systems (MEMS) technology. These capacitive accelerometers are reliable, long-term stable, and precise. MEMS technology facilitates the precise measurement of both static (DC) and continuous accelerations, allowing for the calculation of the velocity and displacement of moving objects.

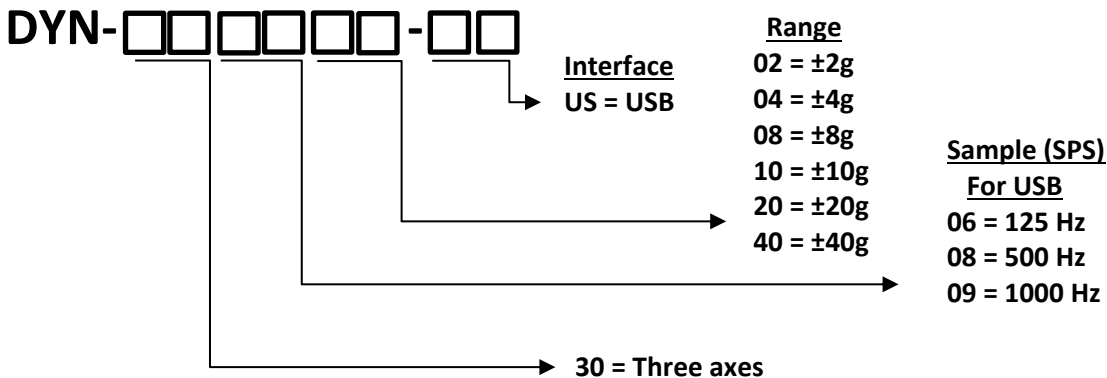
Sensor is designed with three digital interfaces (USB, RS232, CAN) and can detect dynamic (AC) accelerations with amplitudes ranging from $\pm 2g$ to $\pm 40g$. It has a speed of up to 4000 samples per second and a resolution close to 4 μ g in three axes. Users can choose the appropriate sensor based on their needs. The power supply voltage is flexible, ranging from 5 to 16 VDC. The triaxial accelerometers allow quick and easy mounting.

We offer USB accelerometers in two configurations:

8g sensor: Include 2g, 4g and 8g.

40g sensor: Include 10g, 20g and 40g.

Marking:



Example: DYN-300840-US: Triaxial, 500 SPS, $\pm 40g$, Capacitive Accelerometer with USB Interface.

Specifications:

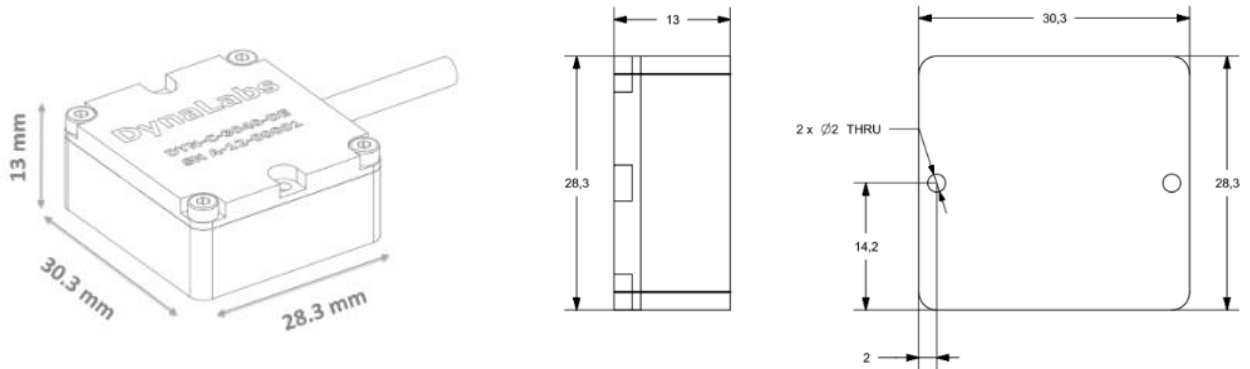
Full-scale acceleration	(g)	± 2	± 4	± 8	± 10	± 20	± 40
Sensitivity	(µg/LSB)	3,90625	7,8125	15,625	0,195313	0,390625	0,78125
Sensitivity (Change/°C)	(%/°C)	±0.01	±0.01	±0.01	±0.01	±0.01	±0.01
0 g Offset	(mg)	±25	±25	±25	±125	±125	±125
Noise	(µg/√Hz)	25	25	25	75	85	90
Non-Linearity	(%)	0,1	0,8	1,6	0,1	0,5	1,3
Resolution (1 LSB)	(µg)	4	8	16	20	40	80

Physical and Environmental:

Operating Voltage	5V - 16 V		
Operating Power/Current	1W/62.5 mA		
Operating Temperature	-40 °C to + 85 °C		
Shock Limit	5000 g		
Protection Level	IP 68		
Connector at Sensor (open ended)	Pin 1	Red	+5V
	Pin 2	White	D-
	Pin 3	Green	D+
	Pin 4	Black	GND
Mounting	Adhesive or screw holes		
Housing Material	Anodized Aluminum		
Weight (without cable)	80 g		

Sample per second (SPS)	Low-Pass Filter (Hz)
125	31.25
500	125
1000	250

Technical Drawings:



Options:

- Customize Range
- Customize Frequency
- Customize Cable Length (5m standard cable)
- Customize Aluminum or Steel

Quality:

All Dynalabs products are **CE** compliant.