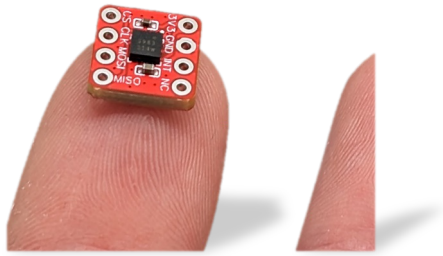
SRX-NANO-SENSORS



- 6 axis IMU
- Barometer
- Magnetometer

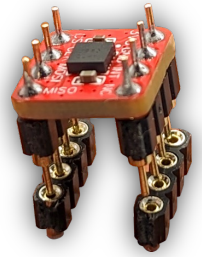
Description

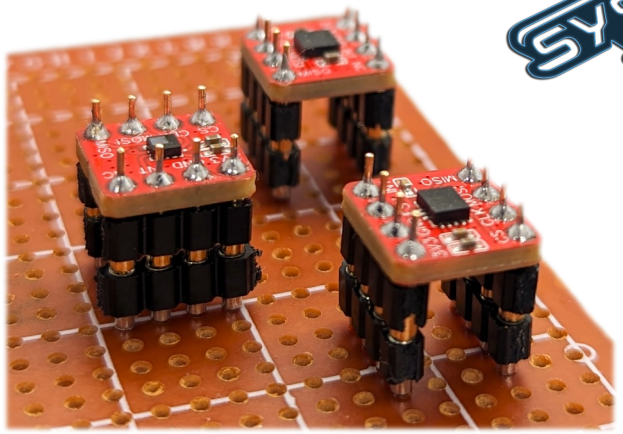
The SRX-NANO-SENSORS are small size, low power and high performance motion measurement units that intends to be integrated in robotic applications development. Their extreme compactness allows easy prototyping on breadboard and integration on host board with direct soldering of back side pads.

Included C++ library allows easy sensors configuration and reading.

Modular placement

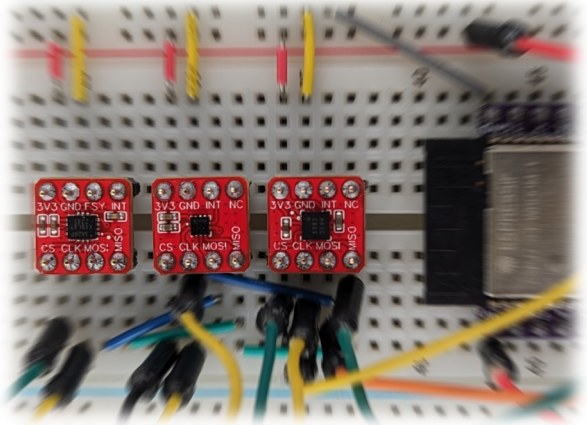
High reliability clip-on pins





Features

- Best in class motion sensors in term of drift, resolution, noise level…
- Extreme compactness
- Dev-board format for easy prototyping with exposed back pads for direct host board solder integration
- Clip-on pins for use on breadboard and modular designs



Sensors characteristics

	Gyrometer	Accelerometer	Barometer	Magnetometer
Range	$\pm 2000\ °/s$	$\pm 16\ g$	$260 - 1260\ hPa$	$\pm 8\ Gauss$
Noise (RMS at default Bandwidth)	$0{,}045\ °/s$	$0{,}85\ mg\ for\ XY$ $1{,}15\ mg\ for\ Z$	$0{,}0087\ hPa\ (0{,}073m)$	$0{,}6\ mGauss$
Resolution	$0{,}0038\ °/s$	$3{,}0518 \cdot 10^{-5} g$	$0{,}0244\ Pa\ (0{,}002\ m)$	$0{,}061\ mGauss$
In run bias (20°C)	$7 - 10\ °$	–	–	–
Polling Frequency (default)	$500\ Hz$ (adjustable → 32kHz)	$500\ Hz$ (adjustable → 32kHz)	$71{,}4\ Hz$	$100 Hz$ (adjustable → 1000Hz)
Bandwidth (-3dB)	$230{,}7\ Hz$	$230{,}7\ Hz$	$35{,}7\ Hz$	$50\ Hz$

Hardware

Interface

- SPI
- I2C

Supply

- $3{,}3V$

Dimensions

- Length = $10{,}5\ mm$
- Height = $10{,}5\ mm$
- Width = $1{,}6\ mm$