

Inertial Measurement Unit (IMU)

FI 210

The FI 210 is a high performance navigation-grade Inertial Measurement Unit (IMU) that integrates three fiber optic gyros with three high-accuracy accelerometers, characterized by its excellent stability, environmentally sealed in rugged housing. The FI 210 provides digital data of incremental velocity and angular rate through Synchronous Data Link Control (SDLC) or Universal Asynchronous Receiver Transmitter (UART). The FI 210 uses low power consumption requiring single voltage at 5 V and comes with versatile options to provide functions and upgrades for customers.

IMMU



Features

- 3 axis Fiber Optic Gyroscopes / 3 axis MEMS Accelerometers
- Bias Repeatability : 0.01 /hr (typ.)
- Angle Random Walk : 0.002 $\% \sqrt{\text{hr}}$
- Power Consumption : 6 W @RT
- Operating Voltage : 5 V
- Weight : 12 kg (without case : 6 kg)

Applications

- Military & Defense
- Guidance & Navigation
- Marine Electronics

Specifications

Performance	
Rate Sensor	
Bias Repeatability	< 0.01 /hr (typ.)
Scale Factor Accuracy	< 100 ppm
Angle Random Walk	< 0.002 $^{\circ}/\sqrt{\text{hr}}$
Accelerometer	
Bias Repeatability	< 100 μg ¹⁾
Scale Factor Accuracy	< 100 ppm
Acceleration Range	± 40 g
Electrical/Mechanical	
Operating Voltage	5 V
Power Consumption	6 W @RT ²⁾
Signal Input / Output	SDLC / UART
Sampling Rate	400 Hz
Dimensions (L x W x H)	260 mm \times 218 mm \times 168 mm
Weight	10 kg
Shock	40 g, 11 msec (Saw-tooth)

1) It is optional.

2) < 9W @ -40°C

The specification and technical information contained herein are subject to change without notice and are furnished without charge or obligation. They are given and accepted at recipients sole risks.



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