SmartIndustrial™

PRIMARY APPLICATIONS

Agriculture
Bridge GNSS outage, provide terrain compensation inputs in various agricultural environments for equipment navigation, guidance, and positioning.

Mapping, Surveying, & Georeferencing
Maintain blade and bucket position on bulldozers, excavators, motor-graders, etc. IMU data is coupled with GNSS to constrain position and bridge GNSS outage.

Construction Equipment
Precision data enables the creation of HD surveys and maps, but also provides exact position for stabilization and location.

Manufacturing & Robotics
Industrial robots use motion data to enable automation, improve efficiency, monitor conditions via the precise motion and vibration measurements produced.

FEATURED PRODUCTS

IIM-42652

Compact 6-axis configurable IMU that can withstand an extended operating temperature range while requiring very low power

IIM-42351/2

High-performance, Low-power Accelerometer with multiple capabilities to enable easy, robust and accurate inertial and vibration measurements

IIM-46230/4

High-performance fault tolerant 6-Axis IMU that combines multiple 3-axis gyroscopes and 3-axis accelerometers packaged in a single module

PRODUCT CATEGORIES

IIM-42352
Vibration Sensing and Synchronization

- Operating Temperature Range of -40°C to 105°C
- Ability to provide external clock to synchronize with the system
- Bandwidth measurement up to 4 kHz

IIM-42351
Construction Tools and Machinery

- Operating Temperature Range of -40°C to 105°C
- 10,000g shock withstand powered
- Good stability over temp

IIM-42652
Autonomous Mobile Robots & Equipment

- Operating Temperature Range of -40°C to 105°C
- 10,000g shock withstand powered
- Good bias instability 6.9 deg/hr
- Low noise density 70ug

IIM-46230 & IIM-46234
High End Industrial, GNSS Module, Delivery Systems

- Best in class bias instability 1.9°/hr
- Ultra low ARW = 0.09°/√(hr)
- Processing power to incorporate complex algorithms
- Fault tolerance

PRODUCT DETAILS

Product Number	Package (mm)	Gyro Sensing Range (°/sec)	Accel Sensing Range (g)	Interface	Notes
IIM-42351	2.5 × 3 × 0.91 14-pin LGA	2000	16	I3C^{SM}, I²C, or SPI	Compact, lower power, extended temperature range
IIM-42352	2.5 × 3 × 0.91 14-pin LGA	n/a	16	I3C^{SM}, I²C, or SPI	Low-noise accelerometer for vibration sensing
IIM-42652	2.5 × 3 × 0.91 14-pin LGA	n/a	16	I3C^{SM}, I²C, or SPI	Low-noise accelerometer for tilt sensing
IIM-46230	Module	2000	16	UART, SPI	High-performance, fault tolerant, low bias instability
IIM-46234	Module	480	8	UART, SPI	High-performance, fault tolerant, low bias instability

Scan Here
for additional materials and information.