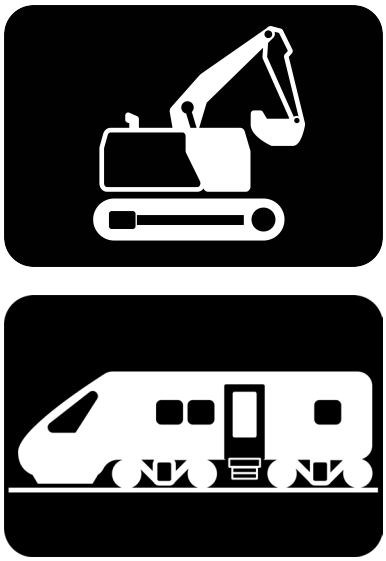
Technology to Inspire Innovation

JAE

MEMS - IMU JIMS-80S



Key features

- Cost effective MEMS Inertial sensor
- Real time data outputs : Angular rate, acceleration, roll, pitch
- Data rate of 100Hz
- Compact and lightweight
  54 × 110 × 29 (mm), 220g
- IP67 Waterproof, Dustproof
- Ruggedized

Applications

- Construction vehicles
- Railway
- Ships
- Drones

The JIMS-80S is a compact and light weight MEMS (micro electro mechanical system) based IMU (inertial measurement unit) that utilizes JAE's proprietary inertial navigation technology originally developed for the aerospace/space industry. Three gyroscopes and three accelerometers are mounted in one compact unit with outputs optimized using a specially developed algorithm. Accurate measurements of attitude angle, angular rate and acceleration can be provided for applications including industrial equipment or vehicles.

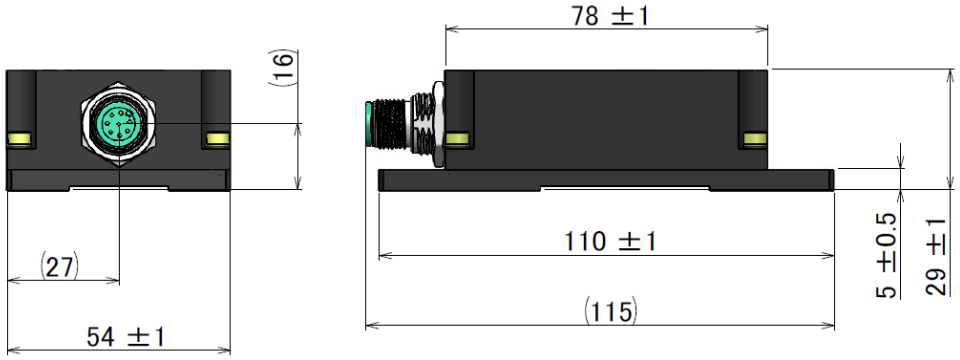
To be exported in accordance with all relevant regulations

Technical data

Environmental		
Temperature	Operating	-40 °C to +80 °C
	Non-operating	-40 °C to +85 °C
Shock	Operating / Non-operating	500 G
Electrical		
Power Supply Voltage		+9VDC to +32VDC
Power Consumption		≦1W
Mechanical		
Width×Depth×Height		W54×D110×H29mm
Weight		≦0.22kg
Performance		
Attitude	Roll (±180°)	0.1°rms
	Pitch (±90°)	0.1°rms
	Yaw (0-360°) *	-
Angular Rate	Range	±300°/s
Acceleration	Range	±78.4 m/s^2
Function and Interface		
Data outputs		Angular Rate, Acceleration, Attitude (Pitch, Roll, Yaw)
Interface		CAN
		RS-232C

* RS232-C only

Dimensional drawings



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For more information on these products and other product ranges visit
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Document revision table

Document number	Issue	Revision date	Changes
VCL001-000025	01	10/01/2021	New document

JAE reserves the right to modify specifications without prior notice.