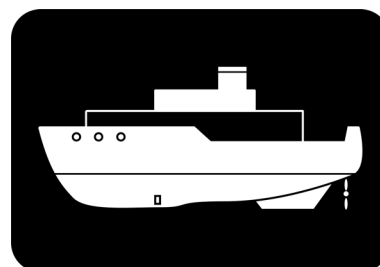
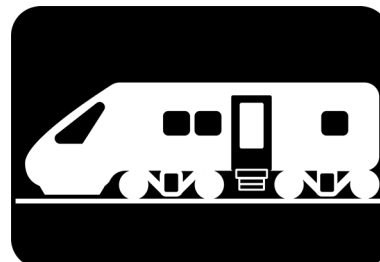


MEMS - IMU JCS7603



Key features

- High performance MEMS Inertial sensor
- Real time data outputs : Angular rate, acceleration, roll, pitch, heading and position*
- GPS Hybrid available
- Compact and lightweight
87 × 128 × 88 (mm), 850g
- Maintenance free

*Optional : GPS receiver embedded

Applications

- Railway
- Ships
- Aircraft
- Vehicles
- Launch vehicles
- Helicopters
- Drones
- UUV

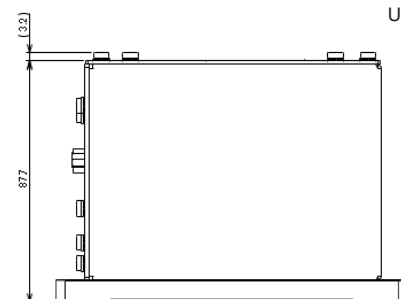
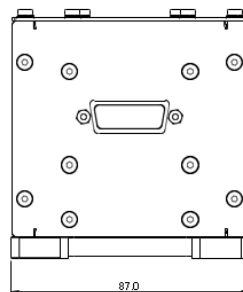
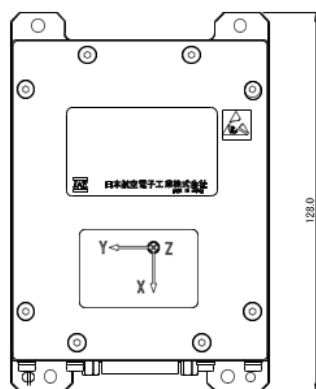
The JCS7603 is a high performance inertial measurement unit that utilizes industry leading high performance MEMS gyroscopes and accelerometers. It is a small, lightweight and cost effective MEMS IMU that can be used for various applications. Combined with optional GPS information, the JCS7603 provides accurate angular rate, acceleration, attitude angle, heading and position.

To be exported in accordance with all relevant regulations

Technical data

Performance		
Attitude	Roll ($\pm 180^\circ$)	0.1°rms
	Pitch ($\pm 90^\circ$)	0.1°rms
	Heading (0° - 360°)	$\pm(1\%$ of input angle $+0.4^\circ/\text{min}$)
Angular Rate	Range	$\pm 400^\circ/\text{s}$
	Bias instability*	0.1°/h
	Random walk*	0.02°/√h
Acceleration	Range	$\pm 98 \text{ m/s}^2$
	Bias instability*	15 μG
	Random walk*	0.05 m/s/√h
Function and Interface		
Data outputs	Angular Rate, Acceleration, Attitude, Heading, Velocity, Position (option)	
Interface	RS-422 (1Mbps or 115.2kbps)	
	RS-232C (10Hz)	
Electrical		
Power Supply Voltage	+20VDC to +30VDC (+24VDC Nom.)	
Power Consumption	$\leq 5\text{W}$ (+24VDC Nom.)	
Mechanical		
Width×Depth×Height	W87×D128×H88mm	
Weight	$\leq 0.85\text{kg}$	
Options		
GPS Hybrid / Velocity Hybrid		

Dimensional drawings



*MEMS sensor performance

Unit: mm

For more information on these products and other product ranges visit www.jae.com

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Document revision table

Document number	Issue	Revision date	Changes
VCL001-000024	01	10/01/2021	New document

JAE reserves the right to modify specifications without prior notice.