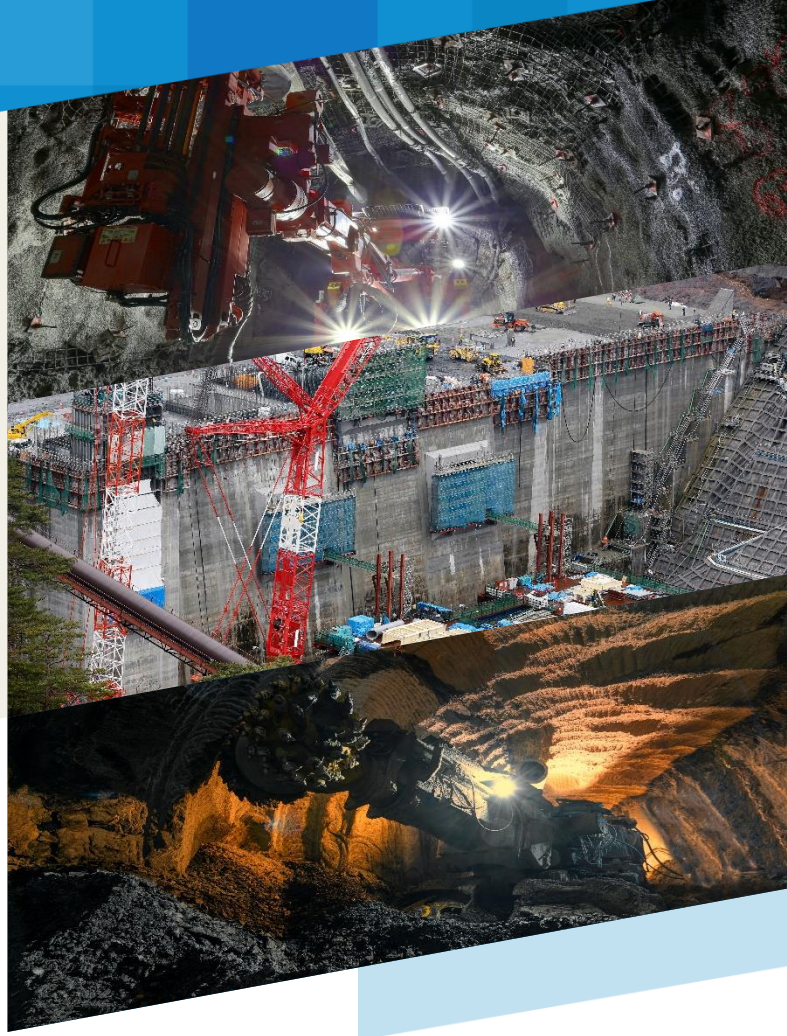
Northfinder™
Attitude & Heading Reference Systems (AHRS)
GCAH-12C-04
(Regular model)



Description

- Real-time attitude and heading angles are output without GPS
- Initial alignment is easy just to send a command
- All is automatically calculated using inertial sensor outputs
- By applying MEMS technology, GCAH-12C-04 is smaller, tougher, and less expensive than traditional AHRS using RLGs or FOGs

Application

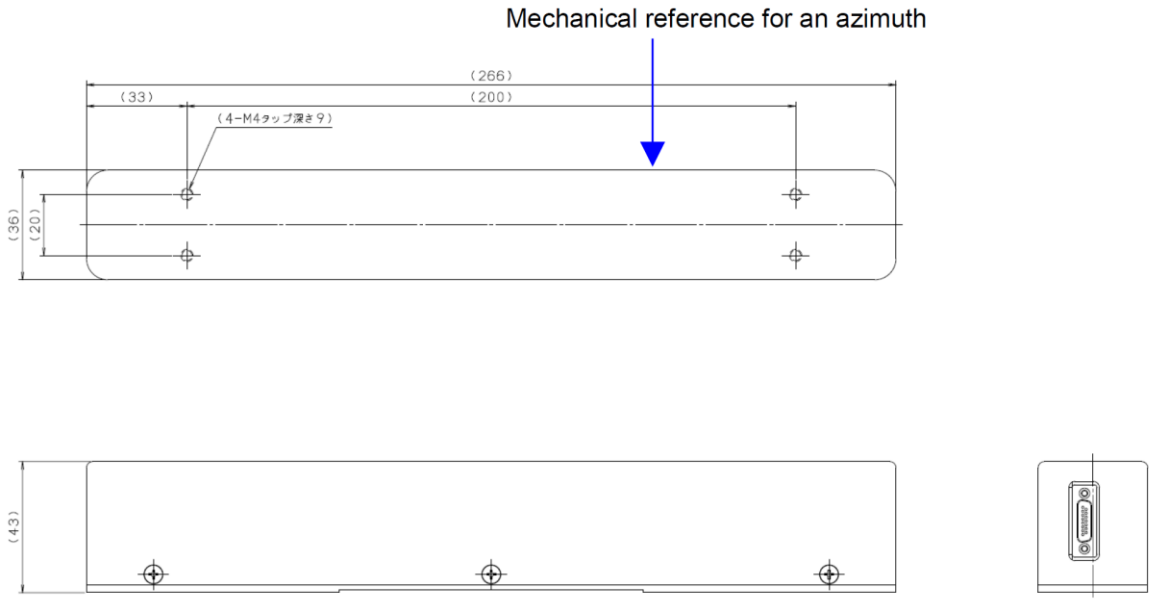
- Inertial Navigation System for Aerospace and Maritime vehicle
- Autonomous control for Railway, Automotive and Civil Construction
- Down Hole Surveying and Mapping

Etc.

Technical Data

Item		Value
Static angles Azimuth	Range	±180°
	Accuracy	±2.5° x (cos λ·cos θ)$^{-1}$ (1σ)　(λ : Latitude) *1
Attitude	Range	Pitch(θ) : ±90°,　Roll(ϕ) : ±180°
	Offset error	Pitch: < ±0.1°rms,　Roll: < ±0.1°rms x (cos θ)$^{-1}$
	Repeatability	Pitch : < 0.02°(1σ),　Roll : < 0.02°x (cos θ)$^{-1}$ (1σ)
Dynamic angles Azimuth Attitude	Error	< 0.5°max. (Without angle drift)
	Resolution	< 0.05°
	Angle drift	< 5°/h max.
Settling time		1.5 minutes (under static condition)
Electrical Interface		D-sub 15
Communication protocol		RS-422 (Baud rate : 230.6 kbps)
Size & Weight		36 x 43 x 266 mm, (Φ30 x 257mm),0.7 kg
Power supply		6.5 to 24 VDC (Typical 12 VDC)
Power consumption		< 1.5 W
Temperature range		-20 to 65 ℃ (Operation & Storage)

* 1 Target rms value



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JMA QMS REGISTRATION CENTER JMAQA-2598

Specification subject to change without notice. Issue Sep./2023