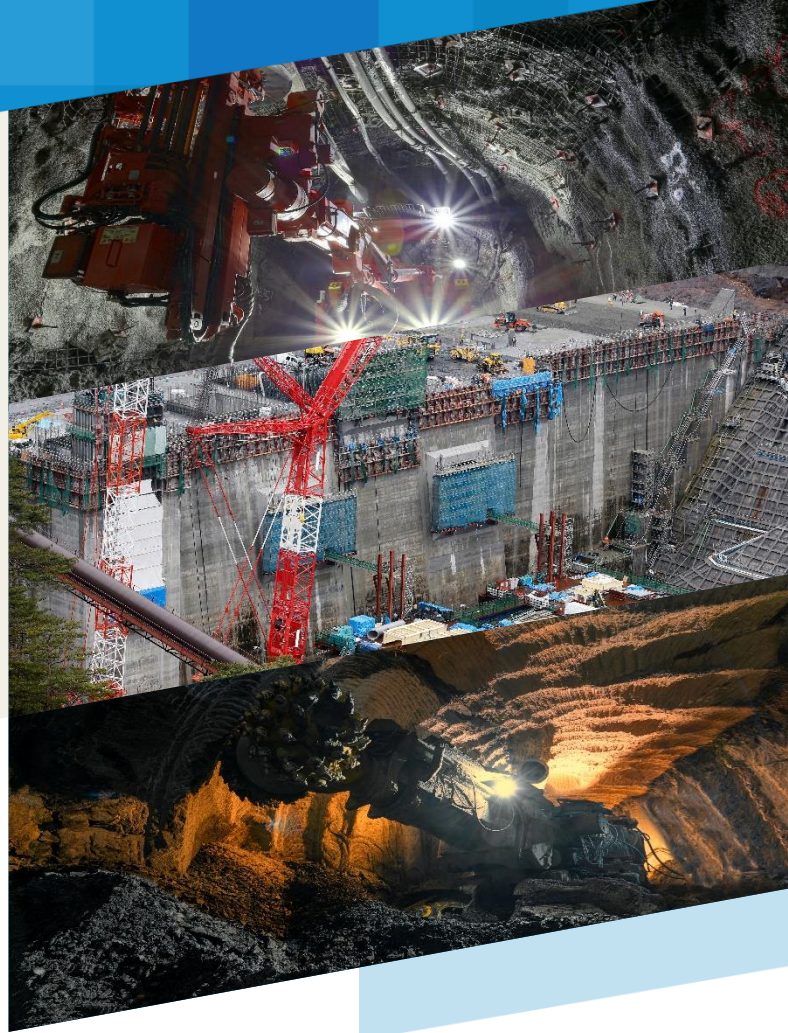


Northfinder™ Attitude & Heading Reference Systems (AHRS) **GCAH-12C-03** (Special model)



○ 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-03 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

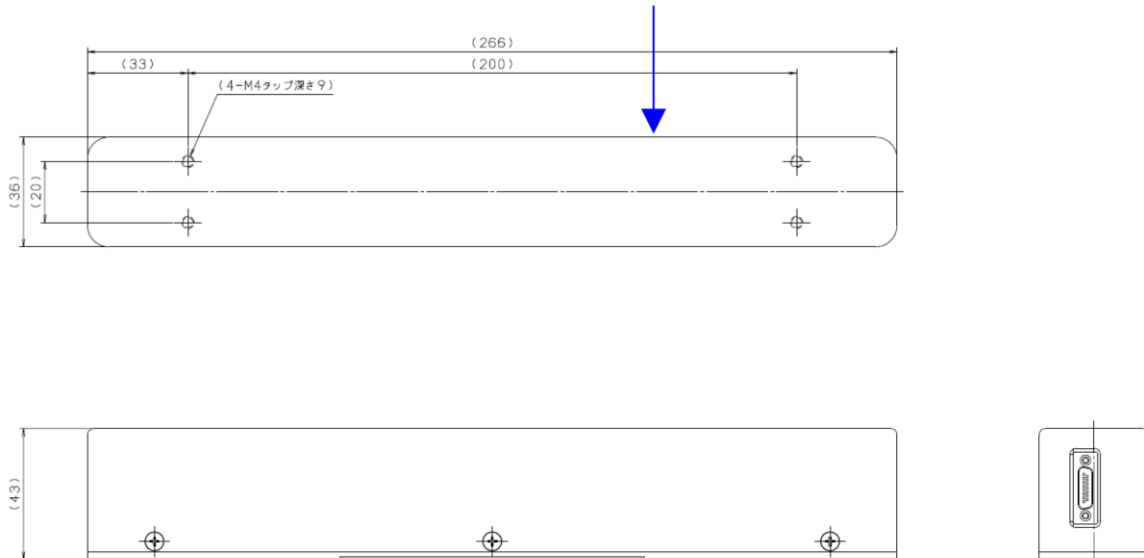
Etc.

Technical Data

Item		Value
Static angles Azimuth	Range	±180°
	Accuracy	±1.5° × (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 × (cos θ) ⁻¹
	Repeatability	Pitch : < 0.02°(1σ), Roll : < 0.02° × (cos θ) ⁻¹ (1σ)
Dynamic angles Azimuth Attitude	Error	< 0.5°max. (Without angle drift)
	Resolution	< 0.05°
	Angle drift	< 3°/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 °C (Operation & Storage)	

* 1 Target rms value

Mechanical reference for an azimuth



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