# Cogging torque and Sensor linearity measuring device

## Model ／ CG-1000

The cogging torque and sensor linearity generated when the test motor is driven from the outside are measured in synchronization with the reference angle signal of the rotating shaft. Automatically measures the cogging torque and sensor linearity for one rotation of the mechanical angle.

- **Measurement rotation speed: 0.1 to 100rpm**
- **Torque range: ±0.2Nm**
- **Torque measurement resolution:  about 62μNm(±2.0Nm/16bit)**
- **Sensor type: Resolver / TMR / Encoder**
- **Angular resolution: 0.1°**

Unique mechanism design enables cogging torque measurement that suppresses the influence of cogging torque on the driving side of the external drive source.

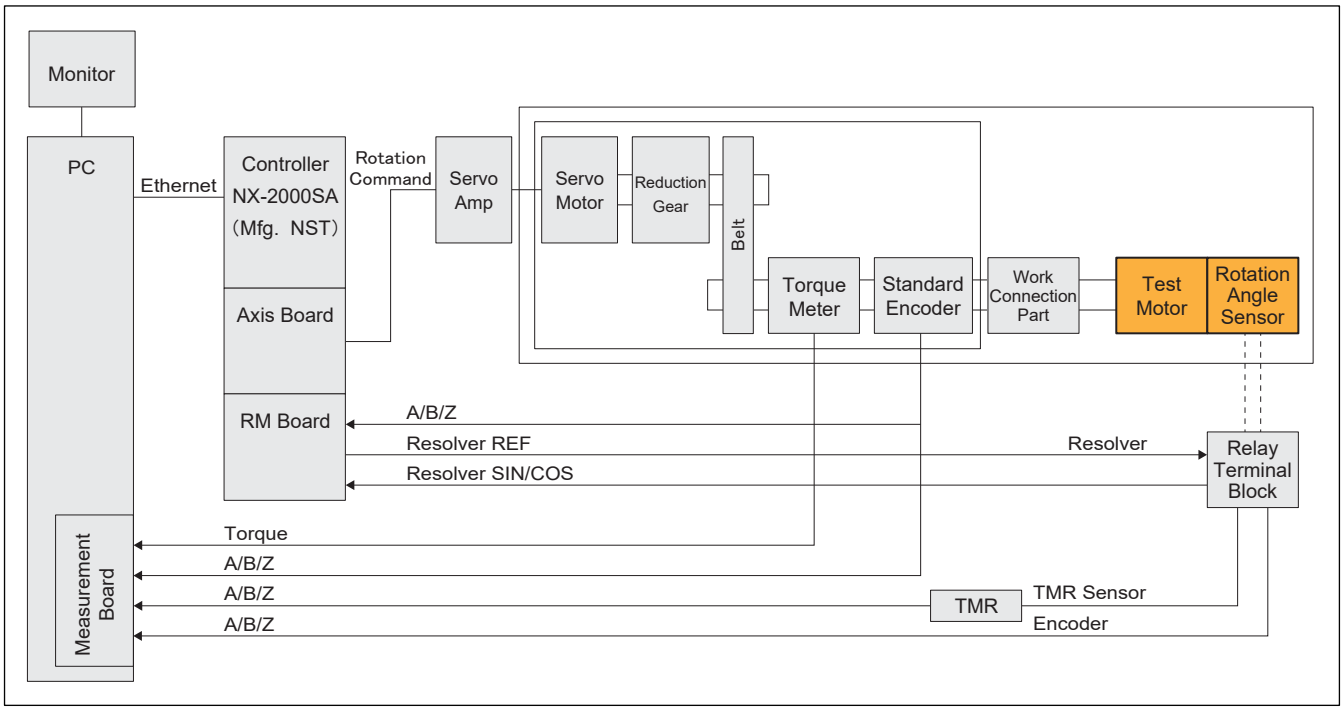
## ■ Features

- It can automatically measure the cogging torque of the test motor and the angular error of the electrical angle (resolver, TMR, encoder).
- By adopting a unique structure in the power transmission part from the drive source,the effect of cogging torque on the drive side is suppressed.
- In order to reduce equipment space, it has a structure that integrates the mechanism and control panel.

## ■ Specifications

| Title | Content |
|---|---|
| Correspondence work | 3-phase brushless permanent magnet synchronous motor, stepping motor, servo motor |
| Torque measurement range | ±2.0Nm |
| Torque measurement accuracy | ±0.2% of FS （torque meter accuracy + measuring device accuracy） |
| Torque measurement resolution | About 6.2μNm （±0.2Nm/16bit） |
| Sensor type | Resolver/TMR/Encoder |
| Rotation range | 0.1～100rpm |
| Angular measurement range | 360° |
| Angular resolution | 0.1° |
| Angular accuracy | ±8 arcsec |
| External dimension（mm） | W1000×D600×H900 |

## ■ Block diagram




## Development / manufacture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