



TMS/TMM61

Precise inclination measurement in a compact design

INCLINATION SENSORS

SICK
Sensor Intelligence.



Technical data overview

Number of axis	1 / 2 (depending on type)	
Communication interface	CANopen	
Measurement range	1-dimensional	360°
	2-dimensional	± 90°
Housing material	Plastic (ABS)	
Connection type	Cable, 5-wire, with male connector, M12, 5-pin, 0.2 m	
Programmable/configurable	Over PGT-12-Pro	
Accuracy	± 90°, 2-dimensional, ≤ ± 60°	Typ. ± 0.1°, max. ± 0.2°
	≤ ± 80°	Typ. ± 0.2°, max. ± 0.3°
	360°, 1-dimensional	Typ. ± 0.15°, max. ± 0.25°

Product description

The TMS61 one-dimensional inclination sensor and the TMM61 two-dimensional inclination sensor are setting new standards with respect to size, flexibility, and performance. In their small, rugged plastic housings, the sensors offer excellent resolution and accuracy – what's more, this is achieved over the entire measuring range and in an extremely wide range of ambient conditions. The CANopen interface enables a whole host of device parameters to be adapted, allowing the sensor to be perfectly tailored to the application. The new PGT-12-Pro handheld programming tool from SICK makes configuration much easier. As a result, the user is ready to go in just a few clicks and can cut out the time-consuming task of configuring the sensor via the control system.

At a glance

- Compact inclination sensor with measuring range of 360° (single-axis) or ±90° (dual-axis)
- Compensated cross sensitivity and configurable vibration suppression
- Convenient CANopen interface
- UV-resistant, impact-proof plastic housing
- High resolution (0.01°) and accuracy (±0.1° typ.)
- Programmable with the PGT-12-Pro

Your benefits

- Inclination measurement in two axes without mutual interference
- Single-axis inclination measurement over 360° with configurable zero point
- Flexible adaptation to the application via the CANopen interface or PGT-12-Pro handheld programming tool
- Reliable output signal thanks to configurable digital filter
- Precise leveling thanks to high accuracy over the entire measuring range
- Compact design for applications with limited space
- Can also be used in the harshest ambient conditions thanks to fully encapsulated electronics
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Fields of application

- Agricultural and forestry machinery
- Construction machinery and special-purpose vehicles
- Solar thermal energy and photovoltaics
- Automated guided systems
- Crane and lifting technology
- Wind power plant

Ordering information

Other models and accessories → www.sick.com/TMS_TMM61

- **Communication interface:** CANopen
- **Housing material:** Plastic (ABS)

Number of axis	Measuring range	Type	Part no.
1	360°	TMS61B-PCH360	1073786
2	± 90°	TMM61B-PCH090	1073787

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com