Important Notes for Installation:

- Please read the datasheet, manual and instructions thoroughly prior to installation.
- Installation should be attempted only by individuals familiar with proper installation techniques and with codes, standards, and proper safety procedures for electrical installations.
- Recommended to use industrial light weight plastic molded counter connectors and not heavy steel housing M12 counter connectors.
- The use of termination resistors. (see earlier section)
- Please check the modes of operation and transmission.
- Check for all CANopen objects supported by gSENS WGX for configuration Verify the data packages for CANopen configurations of gSENS WGX (especially node ID, baud rate, bus timeout period)
- Node ID can never be set to 0 and no two nodes can have same node ID.

Bus termination

It is very important to add termination resistors to the gSENS WGX inclination sensors which are used at the start or end of the CANopen bus in order to prevent data corruption or missing of data at higher transmission rates (\geq 50 kB).



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gSENS WGX

Inclination sensor



Installation leaflet

Thank you for purchasing gSENS WGX. Read this leaflet thoroughly before installation and use the inclination sensor carefully. Please store this leaflet at a safe place for later reference.

gSENS WGX inclination sensors sense and measure the angle of tilt inclination, slope, elevation) of an object with respect to the force of gravity.

Safety Notes

Please check for any external damage to the housing or connector pins.

\Lambda WARNINGS

- Do not remove or mount the connectors while the power supply is on!
- Avoid mechanical load!
- Do not adapt the housing additionally!

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Pin assignment



Pin	Signal	Wire color
1	CAN Ground	green
2	Vs Supply voltage	red
3	0V Supply	yellow
4	CAN high	white
5	CAN low	brown

- Connect using a M12-5pin round connector with a tightening torque in the range of 0.4 0.6 Nm.
- Align the connector and its counterpart and screw it securely till the end.
- IP69K protection guaranteed only with appropriate mating connector and secure connection.
- Use a shielded cable for maximum protection from electro-magnetic interference.

Mounting instructions



- The top side of the inclinations sensor is the one with the label and the axes marked.
- The sensor is set up in place using a simple three point raised mounting.
- We recommend hexagon head screws with, Industrial Housing metrical thread M4 or UNC bolts #6 / Heavy Duty Housing – M6 or UNC ¼" bolts for the mounting. It is advisable to mount with all 3 screws, with equal torque and washers below to avoid high load torque.

- Installation can be done anywhere (but should not subject the sensor to any physical damage in the course of usage).
- Please make sure that the mounting surface is free of grease or lubricants.
- Upon mounting, it is advisable to firmly attach the connection cable to the mounting surface using simple wire/cable clamps, at 10-12 cm (4-5 in) from the connector end to prevent any unintentional movement of the inclinometer.
- We recommend to mount the gSENS WGX single axis sensor with an installation angle (perpendicular to the measurement axis) of max 2°.

CANopen Interface

- Please request the EDS file from your dealer.
- Add the EDS file to the CANopen bus control unit/Master and connect gSENS WGX to the CANopen bus.
- gSENS WGX is pre-calibrated. Hence it can be put to immediate use upon installation and setting of the preset (if required).
- Configuration of gSENS WGX is done through unique objects (specified in the manual). Please download the gSENS WGX CANopen manual from our website for detailed instructions on CANopen configurations, settings and information interchange.
- The following table consists of the factory settings. Please configure as required:

Description	Object	Value
Device type	1000h	0X4019A (Dual axis) 0X3019A (Single axis)
Cyclic timer	2200h	00h (0ms)
Resolution	6000h	0Ah (0.01°)
Node ID	3000h	00h
Baud rate	3001h	03h (125kB)