# SB360

### Full 360° Inclination Sensor Box

Page 1 of 3



The SB360 integrates the NG360 (360° sensor) with an RS485 data interface - enabling multiple inclinometers to be linked together under harsh operating conditions.

### **Features**

- Integrated NG360 inclination sensor with RS485 data interface
- Rugged IP65 rated die-cast aluminum housing with seawater resistant finish
- High Shock Resistance
- Cable junctions on both sides allowing inclinometers to be chained together especially for applications with rough environmental conditions
- Possibility of connecting 78 units of SB360, NG360, XB360 on 4 wire bus
- Stable 4 point attachment of 3.2mm base circuit board
- NG360 galvanically isolated from housing
- Integrated EMV protection
- RS485 cable can be terminated with 100 Ohm load by solder connection on board
- Identical performance to NG360

# Description

The SB360 is a single axis 360° inclination sensor integrating the NG360 within an aluminum die cast metal housing rated to IP65. Also included within the box are EMV protection circuitry and a solder pad for selecting internal or external cable termination. Two PG style liquid tight metal cord grip fittings on either side of the compact metal enclosure along with the RS485 interface enable multiple inclinometers to be linked together under rough operating conditions. The interface circuit and the available addresses permit the user to connect a maximum of 78 sensor boxes to a 4-wire bus (2 conductors for the sensor power and 2 conductors for the RS485 data line).

The SB360 includes all the standard features of the NG360 including the integrated 16-bit microprocessor, which provides for linearity and temperature compensation, and an EEPROM, which stores the calibration data and dynamic control functions. The SB360 is also supplied with a set-up program and communication/angle indication program for viewing the angle real time. Both programs are written for Windows 95/98.

# **SB360**

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Page 2 of 3

# **Applications**

The SB360 can be used anywhere, including rough environments where exact deviation measurements with an unlimited 360° measuring range is required. In particular, the SB360 has been used with success in the building and mining industries, agricultural machinery, transportation equipment, ships, and in process and automatic control engineering as well as general mechanical engineering.

SB360 General Specifications	
Measuring Range	360° (full circle)
Resolution	0.01°
Total Output Error	±0.3°
Plane of Measurement	Parallel to the housing bottom
Time Constant	0.3 seconds (Longer with software adjustment)
Supply Voltage	8 15 VDC
Terminal Resistance	100 ohms
Current Consumption	Approx. 50mA
Operating temperature	-40 to +85°C
Storage temperature	-45 to +90°C
Environmental Sealing	IP65
Housing	Die-Cast Aluminum
Mounting	See Drawing
Connecting Terminal	Max. 2 x 1.5mm <sup>2</sup> (2 x 16 AWG)
Cable Entry	PG7 (metal with integrated strain relief)
Data Protocol	Refer to NG360 Specification Sheet

#### **Options**

Inspection Report, Silicone Filled Housing, Custom Cable

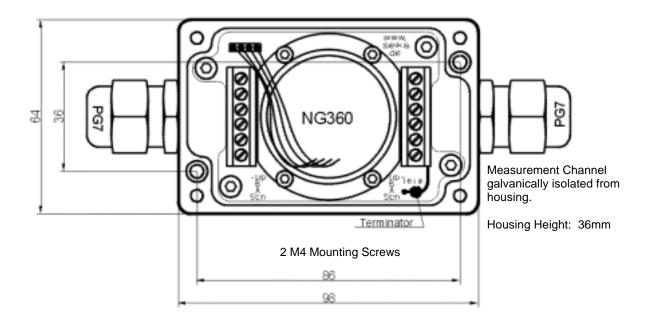
If you have an application that requires alternative specifications, one of our engineers will be happy to discuss how to customize the box for your inclination or acceleration needs.

# **SB360**

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Page 3 of 3

### SB360 Dimensions (in mm)



### **SB360 Wiring Connections**

