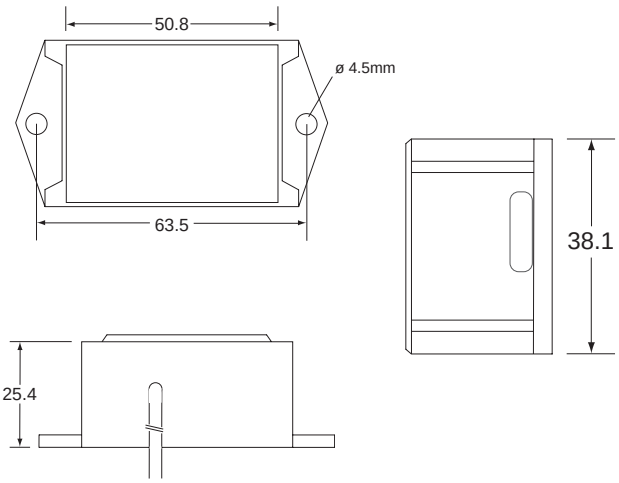
PRODUCT DATA SHEET



Drawings not to scale
All dimensions in mm nominal

SPECIFICATION

Measurement	Single X or Y axis. Dual X and Y axis
Angular range	± 45 Degrees from horizontal
Accuracy	± 1° between ±30°
Alarm Outputs	MOSFET switch. Up to four per axis Load: 1.8A Max. Switching voltage: 35V max. On resistance: 150mOhms Max.
Alarm Levels	-20°, -3°, 3° and 20° (Configurable)
Response Time	150ms
Supply Voltage	9 - 24Vdc
Supply Current	25mA typ.
Reverse Voltage Protection	50Vdc
Operating Temperature	-10°C to +70°C Temperature compensated
Storage Temperature	-20°C to +80°C
Case Material	ABS

Applications include:

- Equipment tilt monitoring / warning systems.
- Alarm control systems.
- The RS232 interface enables all operating parameters to be fully configurable by the customer. These include the alarm & warning level settings and axis selection.

ELECTRONIC DUAL AXIS TILT SENSOR

PART NUMBER
ETS90SS

Rev. No.	Revision Note	Date	Signature
B	First Issue	01/08/05	KG

ISO 9001:2000
Reg. No. FM 21080

As part of the company policy of continued product improvement, specifications may change without notice. Our sales office will be pleased to help you with the latest information on this product range and the details of our full design and manufacturing service. All products are supplied to our standard conditions of sale unless otherwise agreed in writing.

SUNSTAR传感与控制 http://www.sensor-ic.com/ TEL:0755-83376549 FAX:0755-83376182 E-MAIL:szss20@163.com

PRODUCT DATA SHEET

ETS 90SS
Singleor Dual Axis Tilt Sensor with multiple MOSFET outputs.

The ETS 90SS is an intelligent microprocessor controlled single or dual axis sensor that operates over the range of ±45° from horizontal. It can be configured as either a single X or Y axis sensor, or as a dual X and Y axis sensor. The configuration may be either factory pre-set or selectable by RS232.

Full Temperature compensation is included, which allows the unit to operate over the full -10°C to +70°C range without loss of accuracy.

The MOSFET output switching levels are factory pre-set at -20°, -3°, 3° & 20°, or are fully configurable via the RS232 interface.

The switching levels operate as follows:

Level 1 is the most negative, or least positive, angle level. When the measured angle equals, or becomes more negative than level 1, output 1 is turned on.
Level 2 is the next negative or less positive angle level. When the measured angle equals, or becomes more negative, than level 2, output 2 is turned on.
Level 3 is the next positive or less negative angle level. When the measured angle equals, or becomes more positive than level 3, output 3 is turned on.
Level 4 is the most positive, or least negative angle level. When the measured angle equals, or becomes more positive than level 4, output 4 is turned on.
Under normal conditions, no output is on whilst the measured angle is between level 2 and level 3 settings.
In dual axis mode, axis Y uses levels 5 to 8 to switch the corresponding outputs 5 to 8.

Microprocessor control enables the sensor to be rapidly customised for specific applications. If you have an angle or acceleration application that falls outside of our standard range, then please contact our sales office for technical assistance.

ETS 90SS Models

ETS 90SS-1
Single or Dual axis sensor with a single MOSFET output, that operates when either axis measured angle is outside the set alarm levels.

ETS 90SS-2
Dual axis sensor with a single MOSFET output for each axis, that operate when the corresponding axis measured angle is outside the set alarm levels.

ETS 90SS-3
Single or Dual axis sensor with a two MOSFET outputs for each axis, that operate when the corresponding axis measured angle is outside the pre-set alarm levels.

ETS 90SS-4
Single or Dual axis sensor with four MOSFET outputs for each axis, that operate when the corresponding axis measured angle is outside the set alarm levels.

ETS 90SS-6
Dual axis sensor with angle readings output via RS232 only. No MOSFET outputs.

ETS 90SS-L
Dual axis sensor with angle information displayed via a 9 LED array to give visual feedback on the sensor position. One MOSFET output for each axis, that operate when the corresponding axis measured angle is outside the set alarm levels.

ETS 90RC
Use this part number to order an RS232 interface cable. This enables all parameters to be customised by connecting the sensor to a terminal or PC. It includes a 1.5metre lead with mating connector and 9 way D type connector for direct connection to a serial port on a PC. A simple set of commands enables all parameters to be configured by the user using a terminal emulation program.

ELECTRONIC DUAL AXIS TILT SENSOR

PART NUMBER
ETS90SS

Rev. No.	Revision Note	Date	Signature
B	First Issue	01/-8/05	KG

ISO 9001:2000
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