

Extra-accuracy bi-axial Inclinometer

Description

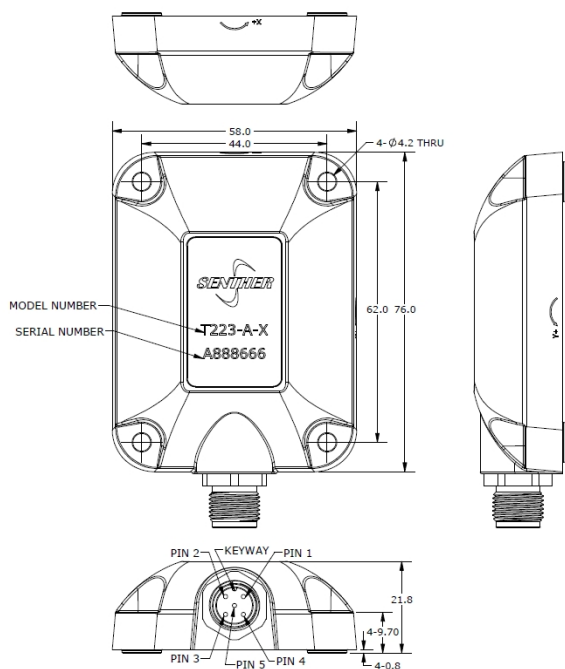
The model T223 dual axis inclinometer achieves high accuracy over a wide temperature range. The fast microcontroller works with a linearization and temperature compensation routines. This full calibrated inclinometer is available with digital output RS232, RS485 and CAN output signals. T223 is mainly developed for wide application of platform leveling, tower monitoring, tip-over protection and tilt alarm. Fast response time and good accuracy makes this device the ideal choice for mobile leveling applications. It features digital signal processing including temperature compensation. The integrated filter improves performance and allows using the sensor in many noisy environments (e.g. vibrations). It is possible to adjust the sensor by different environments for yielding an optimized performance. Customization can be made in terms of angular range, cable and connector. The robust anodized aluminum housing is compatible with oil, grease and fuel. Therefore it is suitable to apply at outdoor and rough industrial field.

Features

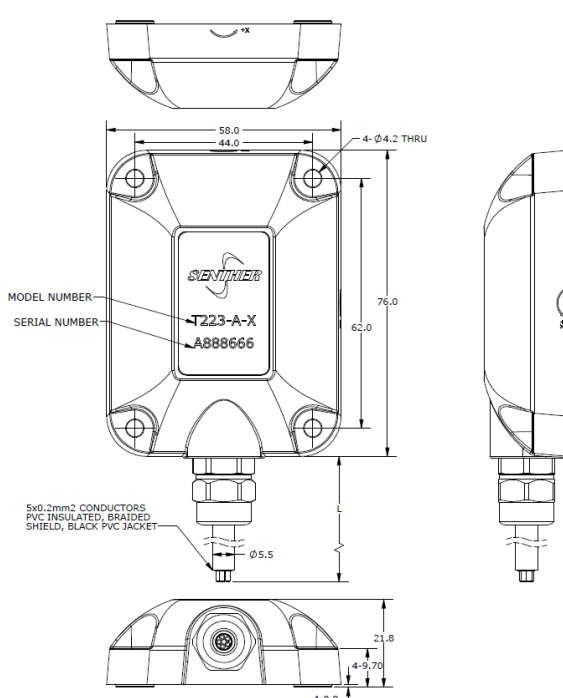
- Extreme Resolution
- Stable output
- Wide supply voltage range
- Single or Dual axial
- Low supply current
- Harsh environment

Application

- Windmill tower tilt
- Geological detection
- Aircraft measurement
- High building monitoring
- Drilling machines



Connector version



Integrated cable version

Specification

Typical at +24°C (+75°F), 12Vdc excitation and <1Hz, unless otherwise stated.

SPECIFICATIONS	STANDARD	UNITS
MEASUREMENT RANGE	±5/10/15/30	°
MEASUREMET ACCURACY (-20°C TO +60°C)	±0.005	°
THERMAL ZERO SHIFT, -40°C TO +85°C	0.0011	°/°C
RESOLUTION	0.001	°
BANDWIDTH	1/2/3/5, DEFAULT 1	Hz
REFRESH RATE	10 MAX	Hz
NON-LINEARITY	±0.003	°
REPEATABILITY	±0.002	°
SHOCK LIMIT	1000	g

SPECIFICATIONS	STANDARD	UNITS
SUPPLY VOLTAGE	9 to 36	Vdc
CASE INSULATION (@100Vdc)	>100	MΩ
WARM UP TIME	<100	mSEC
OPERATION TEMPERATURE	-40 to +85	°C
EMC	EN61000/GBT17626	
PROTECTION	IP67	
CASE MATERIAL	AI ALLOY ANODIZED BLACK	
CONNECTOR	M12X1.0, 5-PINS SOCKET	
MTBF	10	YEARS
WEIGHT (EXCLUDING CABLE)	<200	Gram

OUTPUT INTERFACE CODE X





OPTION	-A	-B	-B1	-C
	RS232	RS485	RS485	CAN
CONNECTOR PIN 1	POWER+	POWER+	POWER+	POWER+
CONNECTOR PIN 2	POWER GND	POWER GND	POWER GND	POWER GND
CONNECTOR PIN 3	TXD	RS485-A	RS485-A	CAN-H
CONNECTOR PIN 4	RXD	RS485-B	RS485-B	CAN-L
CONNECTOR PIN 5	SIGNAL GND	SIGNAL GND	SIGNAL GND	SIGNAL GND
COMMUNICATION PROTOCOL	MODBUS	MODBUS	CUSTOM	CUSTOM

Accessories

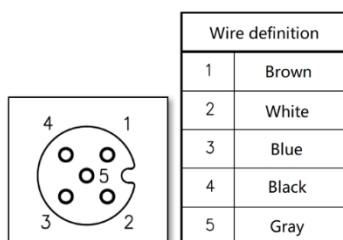
Calibration certificate included.

Part Number	Description	Availability
PM0195	M4x16 hex head mounting screw	4pcs Included
18T-10	10 meters mating cable with M12-5pins connector	Optional
IN-3062	8 channels data acquisition system	Optional

Measurement configuration

Sensor	Mating cable(if applicable)	Data acquisition	Computer
			

18T-L Mating Cable:



Ordering information

T223	-	15	-	B	-	5
Model	-	Range	-	Output interface	-	Cable length(if applicable)
T223	-	5=±5° 10=±10° 15=±15° 30=±30°	-	A= RS232 B= RS485 B1= RS485 Customize C= CAN	-	1=1 meter 5=5 meters Blank=connector version