SPECTROTILT™ *RS485 / 12 bit Electronic Inclinometer*

The **SPECTROTILT™** ***RS485 / 12 bit Electronic Inclinometer*** offers unparalleled accuracy and value. By combining a single axis / hybrid electrolytic tilt sensor, with custom digital electronics and software, Spectron has successfully spanned the gap between cost and performance. Features include two available tilt ranges, +/-11.3 degrees or +/- 45 degrees, on-board linearity and temperature correction, ESD and EMI protection, aluminum housing, all in a hermetically sealed package. In addition, the digital output signal is ideal for long cable runs, eliminating concerns over signal loss and noise.

Applications

- ***Construction Equipment*** ***(Boom Angle, Safe Load Indicators)***
- ***Road Graders and Pavers*** ***(Blade Angle)***
- ***Wheel Alignment*** ***(Caster and Camber measurement***
- **** Antenna Position*** ***(Satellite Dish Elevation Angle)***

General Specifications

Input Voltage ..... +5 to +30Vdc (unregulated)
Input Current 35mA
Output .....RS485 MODBUS (Canbus, contact factory)

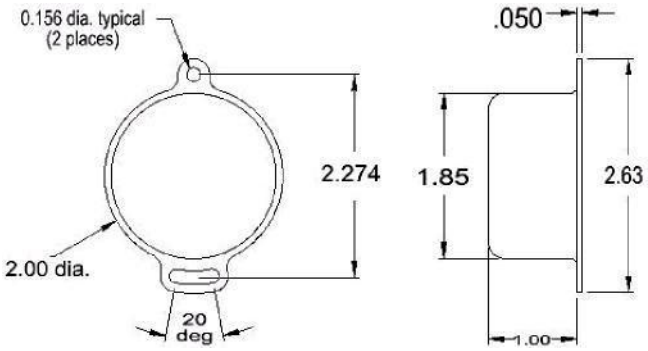
Tilt Range:.....+/-11.3 deg.....+/- 45 deg
Resolution:.....0.003248.....0.011721
Accuracy:.....+/-0.06 deg…+/-0.06 deg (@+/-6 deg)
+/-0.11 deg (@+/- 12 deg)
+/-0.18 deg (@+/- 45 deg)
Output at null (zero degrees) ..... 0 counts
Temperature Range
- operating ..... -40° to +80° C
- storage ..... -55° to +125° C

Temp sensor output:.....0.25 deg C/count
Start-up Time .... <2 second
Vibration .....MIL Std. 810, method 514.4

** The output is transmitted in RS485 format, 9600 baud rate 8 data bits, 1 stop Bit, even parity,in MODBUS levels (0 and +5Vdc). 13 bit, Hexadecimal format*

******* *Accuracy includes all effects, and is defined as the maximum output deviation from the absolute input angle.*

Physical Dimensions (inches)



• vertical mounting shown!

Electrical Connections

Black = Ground
Red = +5 to +30Vdc (unregulated)
Green = A (RS485)
Blue = B (RS485)

Ordering Information

Part Number	Description
SSY0185-VDS12-RS485-11	Vertical mount
SSY0185-VDS12-RS485-45	Vertical mount

Consult factory for further technical information!

SPECTRON SYSTEMS TECHNOLOGY INC.
595 OLD WILLETS PATH
HAUPPAUGE NY 11788
PHONE: 631 582-5600
FAX: 631 582-5671
www.spectronsensors.com

Specifications are subject to change without notice!

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