

# SPECTROTILT™ II

## MICRO-50 – *Dual Axis Digital Inclinometer*

The Spectrotilt™ II – MICRO 50 is a Dual Axis Digital Inclinometer, which delivers an RS232 output. It combines the quality and reliability of the SP 5000 Series tilt sensor, with a microprocessor and 12 bit A to D converter. It features the same open architecture as the rest of the Spectrotilt™ II family, which facilitates easy mounting and installation. The output easily interfaces with most PLC and PC controllers, and is ideal for noisy environments and long cable runs. The MICRO-50 is available in three standard angular ranges, and also with custom fluid viscosities and calibration.



### Applications

- **Safety Systems** (Manlifts, Roll-over protection)
- **Wheel Alignment** (Caster and Chamber measurement)
- **Platform Monitoring and Control**
- **Machine Leveling**

### General Specifications

Input voltage .....+7.0 to +30Vdc  
 Input current ..... 5mA @ +12Vdc  
 Settling time ..... 500 mSec  
 Null offset adjustment ..... programmable  
 Operating Temp range ..... -20 to +70 degC  
 Storage Temp Range ..... -40 to +90 degC  
 Temp. Coefficient of Null ..... 10 arc sec / deg C<sup>0</sup>  
 Temp Coefficient of Scale ..... 0.1% / deg C<sup>0</sup> (typ)

Model#	Linear Range (degrees)	Total Range (degrees)	Linearity (typ. @ 50% lin. range)
MICRO-50-D20	+/-20	+/-35	1%
MICRO-50-D45	+/-45	+/-50	4%
MICRO-50-D70	+/-45	+/-60	consult factory

(cont'd)

Model	Scale Factor (factory calibration)	Output at Null (counts)
MICRO-50-D20	800 cts @ 10 degrees	2048
MICRO-50-D45	1,800 cts. @ 45 degrees	2048
MICRO-50-D70	1,900 cts. @ 60 degrees	2048

### Communication Protocol

Baud rate ..... 19200  
 Parity ..... none  
 Data width ..... 8 bits  
 Flow control ..... none  
 Stop bit ..... 1

\* Consult factory for detailed communication protocol information!

### Ordering Information

Linear Range	[Total Range]	Model#
+/-20 <sup>0</sup>	[+/-35 <sup>0</sup> ]	MICRO-50-D20
+/-45 <sup>0</sup>	[+/-50 <sup>0</sup> ]	MICRO-50-D45
+/-45 <sup>0</sup>	[+/-60 <sup>0</sup> ]	MICRO-50-D70



### SPECTRON SYSTEMS TECHNOLOGY INC.

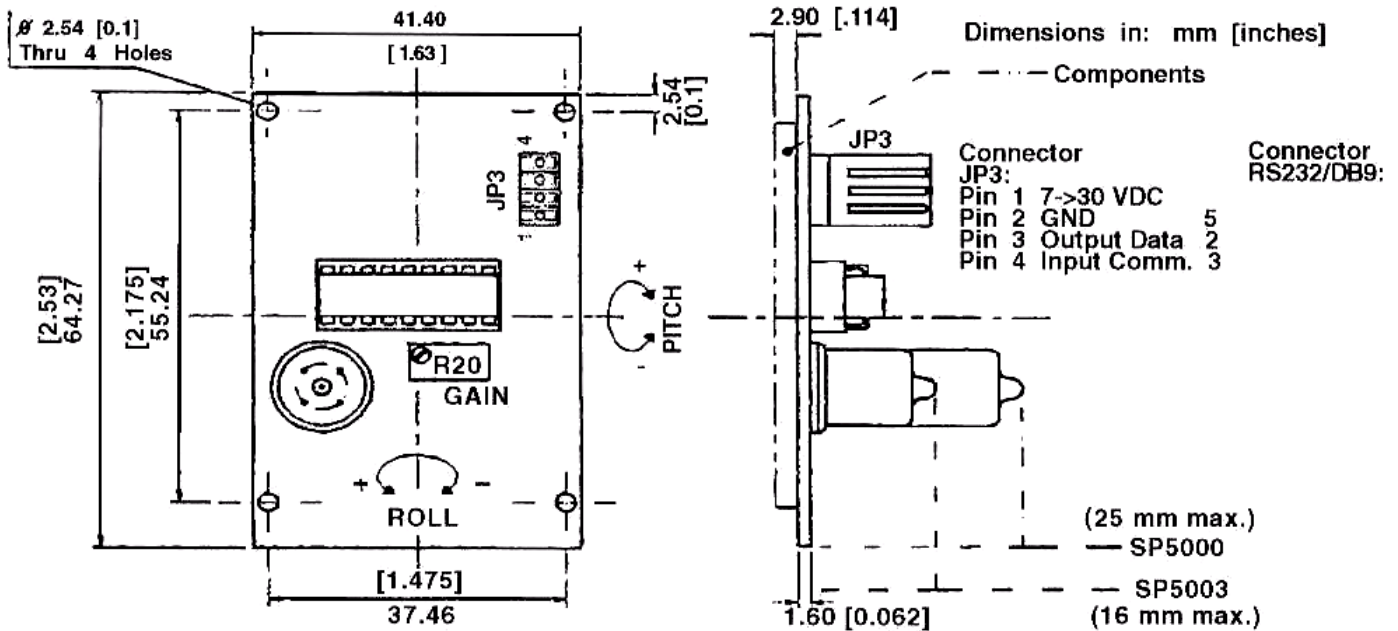
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### Dimensions, Electrical Connections, and Adjustments



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Specifications subject to change without notice!

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