

SPECTROILT™ II

MICRO-50 – Dual Axis Digital Inclinometer

The Spectroilt™ 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 Spectroilt™ 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 C⁰
 Temp Coefficient of Scale 0.1% / deg C⁰ (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 ⁰	[+/-35 ⁰]	MICRO-50-D20
+/-45 ⁰	[+/-50 ⁰]	MICRO-50-D45
+/-45 ⁰	[+/-60 ⁰]	MICRO-50-D70



SPECTRON SYSTEMS TECHNOLOGY INC.

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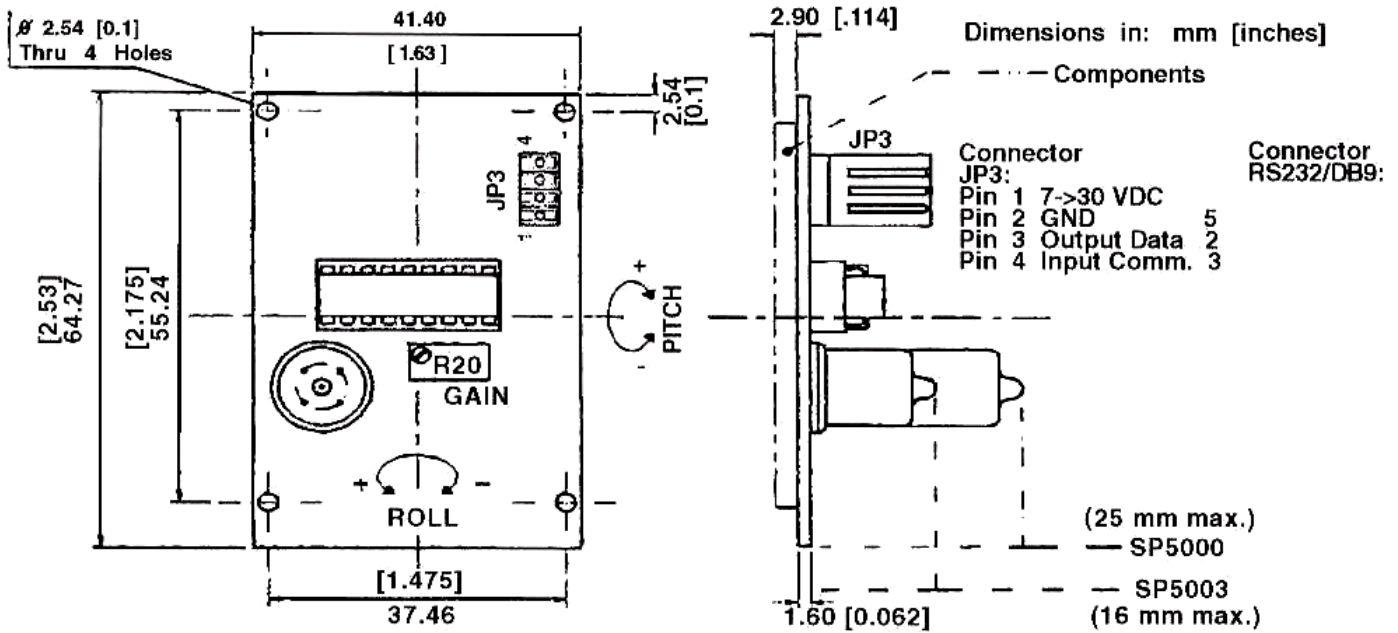
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Doc.# SDS-102-2104

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Dimensions, Electrical Connections, and Adjustments



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