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 C0
Temp Coefficient of Scale	0.1% / deg Co (typ)

Communication Protocol

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

*Consult factory for detailed communication protocol information!

Model#	Linear Range (degrees)	Total Range (degrees)	Linearity (typ. @ 50% lin. range	Scale Factor (factory calibration)	Output at Null (counts)
MICRO-50-D20	+/-20	+/-35	1%	800 cts @ 10 degrees	2048
MICRO-50-D45	+/-45	+/-50	4%	1,800 cts. @ 45 degrees	2048
MICRO-50-D70	+/-45	+/-60	consult factory	1,900 cts. @ 60 degrees	2048

Ordering Information

Linear Range	[Total Range]	Model#
+/-200	[+/-350]	MICRO-50-D20
+/-450	[+/-500]	MICRO-50-D45
+/-450	[+/-600]	MICRO-50-D70



Dimensions, Electrical Connections, and Adjustments

