

AccuStar[®] Electronic Clinometer

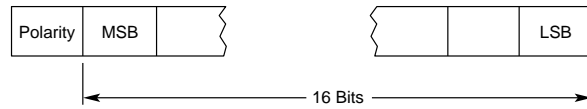
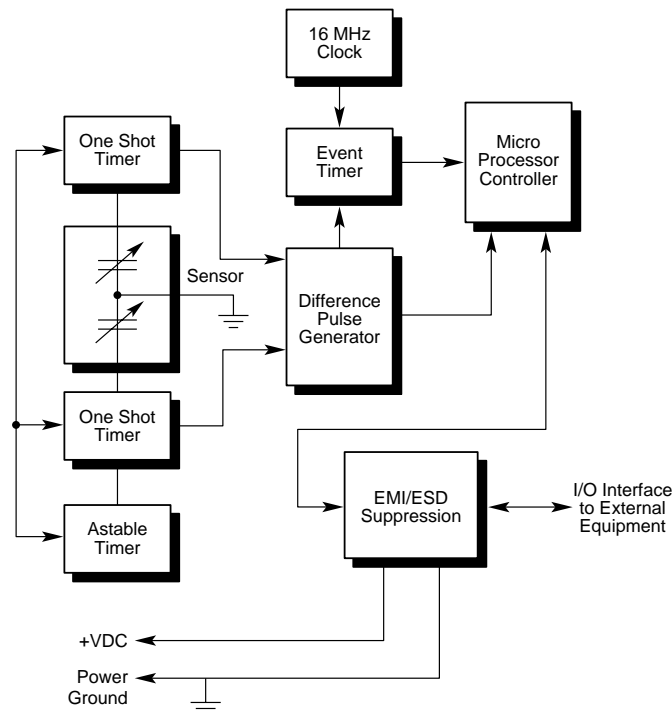
Serial Data Output

Features

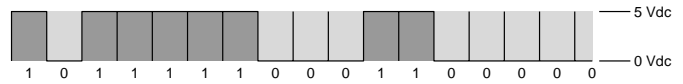
- ❑ **Microcontroller compatible**
- ❑ **Ideal for noisy environments**

The Serial clinometer is a signal conditioned sensor which resolves the angle of tilt to 16 bits of information plus a polarity bit. This device was designed to transmit data to a microcontroller or to an I/O card of a PC through a three wire interface which will work at both TTL and CMOS logic levels. Complete handshaking is used to eliminate timing and transmission problems. The standard version operates on a +5 VDC regulated power supply while an internally regulated version is available. The Serial clinometer was designed with EMI and ESD suppression circuitry on every line.

Serial I/O Block Diagram



Example
 $+31.84^\circ = 1\ 0111\ 1100\ 0110\ 0000$



Contact factory for more details.

Serial Electrical Specifications

Voltage

Voltage Supply

Range	+5 VDC, $\pm 5\%$
Current	15 mA
Scale Factor	1000 counts/degree $\pm 10\%$
Output	CMOS/TTL
Level Output (0°)	0 counts
Binary Range	16 bits + 1 bit polarity (serial)

Electrical Connections

Wire	Source
Black	Power ground
Red	+5 VDC
Yellow	Data
White	Request/Hold
Gray	Ready/Wait