

Minitilt

Motion sensor



The Teledyne CDL MiniTilt is an OEM, surface or subsea pitch and roll sensor. It provides an accuracy of 0.05 degrees in both axes over the full 360 degree range. The unit can be provided in a surface or subsea (3,000m or 6,000m rated) package or can be supplied in an accurately machined mounting frame for OEM applications.

The MiniTilt is highly compatible with existing pitch and roll sensors. It uses a bank of 6 internal option switches to provide a total of 32 different output data formats.

The zero point can be factory set to any position. This allows for unusual mounting arrangements where the MiniTilt can be placed horizontally rather than vertically. The zero point can be set to any mark on the 360° angle so even offset mounting arrangements can be handled.

Specifications

Product	Minitilt motion sensor
Country of origin	USA
Manufacturer	Teledyne Marine
Dimensions	104mm x 87mm

Features

- High accuracy (0.05°) low cost
- 3000m depth rated
- 6000m optional
- Full 360 degree range
- Gyro heading input
- 32 data strings options

Performance

Data output	RS 232 and current loop
Baud rate	9600 (other rates available on request)
Parity	None

8 Pin Connector (Burton or Binder)

1. Vin (5 - 30VDC)	Range 360°
2. GND	Range 360°
3. CL Hi (output)	Resolution 0.01°
4. CL Lo (output)	Accuracy 0.05°
5. RS 232	Calibration points: 128 (per sensor)
6. RS 232	
7. CL Hi (output)	
8. CL Lo (output)	
Temperature coefficient	0.003°
Repeatability	0.03°
Hysteresis	0.05° (average)
Noise	0.01°
Frequency response	0.4 seconds (typical)
Voltage	3 – 50VDC
Current consumption	<10mA (@12VDC typical)
Temperature range (operating)	-30°C to +55°C
Temperature storage	-30°C to +65°C
Surface and underwater housing	85mm diameter, 104mm high

Performance

Mount details	M4, 65mm x 65mm – 4 holes
Weights (air/water)	1.15kg / 0.55kg
Weight of transit case	1.5kg
Dimensions of transit case	240 x 180 x 170mm