

Teledyne CDL

# MICROTILT

## PITCH AND ROLL SENSOR

The Teledyne CDL Micro Tilt is a tiny, dynamic, pitch and roll sensor for use in a huge variety of applications. Measuring only 55mm x 37mm x 26mm OEM (matchbox size) the unit can provide highly dynamic pitch and roll readings at a frequency up to 50Hz.

Its tiny size is made possible by utilizing MEMS (Micro-Electro-Mechanical Systems) sensors. MEMS is the integration of mechanical elements, sensors, actuators, and electronics on a common silicon substrate through the utilization of microfabrication technology.

At an output rate of 50Hz the sensor returns an accuracy better than 0.5 degrees over the range of +/- 30 degrees. A range of oversampling settings allows the selection of output rates down to 1Hz, where the accuracy is better than 0.2 degrees.

Internal DIP switches allow the selection of various options within the device.

A surface version and two subsea versions (3,000m and 6,000m) are available. The unit can also be supplied as an OEM part for inclusion in your equipment.



### PRODUCT FEATURES

- Very Light Weight
- Very Low Power
- Very Small Size
- Highly Dynamic
- Surface Version
- Subsea Version
- 0.2 – 0.5° ACC @ +/- 30°
- 2Hz – 50Hz Output



**TELEDYNE CDL**  
Everywhereyoulook™

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### TECHNICAL SPECIFICATIONS

Range:	+/- 64°
Resolution:	0.01°
Accuracy:	0.5° accuracy to +/- 30° at maximum update rate (approx 50 updates per second) 0.2° accuracy to +/- 30° with oversampling (approx 2 updates per second)
Sample Rates:	1Hz to 50Hz
Temperature Range Operating:	-30 to +55°C
Temperature Range Storage:	-55 to +65°C
Telemetry Interface:	RS-232 or RS-422 (specify when ordering)
Baud Rate:	19,200 baud
Data Bits:	8
Stop Bits:	1
Parity:	None
Depth Rating:	3000 metres, 6000 metres (19,690ft)
Power Requirements:	Power Output: 5-30 VDC (specify when ordering) Current Consumption: <10 mA (@12V typical)
Mounting Details:	4 M3 mount holes 39mm square pitch Or 32mm square pitch

	<b>3000 Metres</b>	<b>OEM</b>
Dimensions:	50mm x 50mm base (2.0° x 2.0° base) 40mm high (1.58° high) 67mm high inc penetrator (2.64° penetrator)	55mm x 37mm x 26mm (2.2° x 1.5° x 1.0°)
Weights:	500 grams (1.1 lb)	80 grams (2.8oz)