

## DeepWater Digital Submersible Tiltmeter

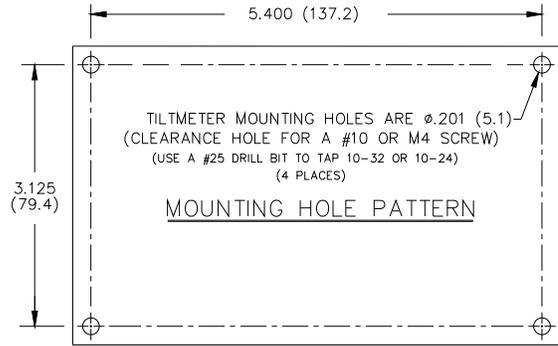
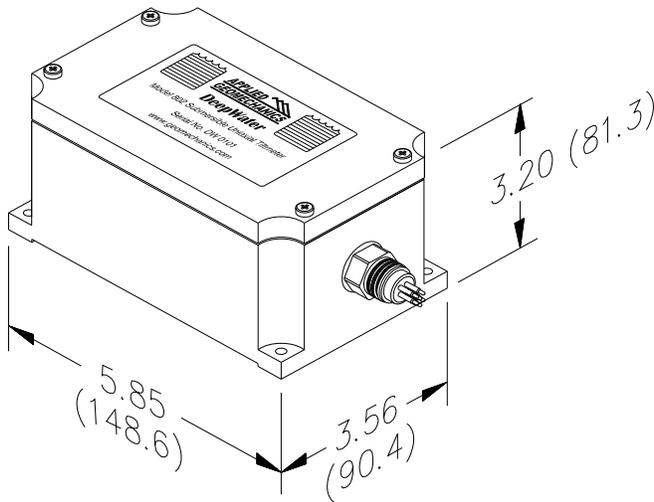
The **DeepWater Digital** is a precision digital tiltmeter designed for underwater measurements and other applications in high-pressure or corrosive environments. The housing is machined from a solid block of 316 stainless steel and incorporates a high-pressure, underwater-mateable neoprene connector. Inside are one or two gravity-referenced electrolytic tilt sensors and our low-noise electronics, delivering precision, high dynamic range and long-term stability under the most demanding conditions. **DeepWater** tiltmeters are excellent choices for offshore applications and for monitoring dams, pipelines and underwater machinery. **DeepWater** tiltmeters are also available with 4-20 mA and analog voltage outputs.



*Call us for details or to place an order!*

	DeepWater Digital (Standard)	DeepWater Digital (Wide Angle)
ANGULAR RANGE	±5 degrees	±60 degrees (greater range available)
RESOLUTION	0.002 degrees	0.02 degree
REPEATABILITY	0.002 degree	0.02 degree
TEMPERATURE COEF.	0.001 degree/°C typical	0.01 degree/°C typical
CHANNELS	Single-Axis or Dual-Axis with 2 Orthogonal Tilt Channels, 1 Temperature Channel	
LINEARITY	0.1% of full span or better	
TIME CONSTANT	0.15 second	
DIGITAL OUTPUT	RS232 or RS485), transmit and receive Baud rate: 9600 (default), 19200, 28800, 57600, 115200, 230400 NMEA 0183 compatible (x, y, temperature, serial no.)	
OUTPUT DATA RATE	User-selectable from 10 samples/second to 1 sample/24 hours	
POWER REQ'TS	7 to 25 VDC @ 27 mA, 250 mV peak-to-peak ripple maximum, reverse polarity protected	
ENVIRONMENTAL	-25° to +70°C operational, -30° to +100°C storage. Case rated to 3500 psi (240 bars), tested to failure at 7000 psi (480 bars)	
MOUNTING	Four no. 10 stainless steel mounting screws.	
MATERIALS	316 stainless steel	
CONNECTOR	6-pin neoprene, underwater mateable	
SIZE & WEIGHT	152 x 102 x 89 mm (6 x 4 x 3.5 inches), 5 kg (11 lb)	

# DeepWater Digital Submersible Biaxial Tiltmeter



DIMENSIONS ARE IN INCHES (millimeters)

Connector Pin	Wire Color in Cable	Function (RS232 version)	Function (RS485 version)
1	Black	Ground	Ground
2	White	not used	Tx-
3	Red	Power	Power
4	Green	Rx	Tx+
5	Yellow (Orange)	not used	Rx-
6	Blue	Tx	Rx+

DeepWater Digital Version	Communications Protocol	
	RS232	RS485
±5 degrees, Uniaxial, Transverse	98041-01	98041-03
±5 degrees, Uniaxial, Longitudinal	98041-02	98041-04
±60 degrees, Uniaxial, Transverse	98041-05	98041-07
±60 degrees, Uniaxial, Longitudinal	98041-06	98041-08
±5 degrees, Biaxial	98041-09	98041-11
±60 degrees, Biaxial	98041-10	98041-12

## Cable Ordering Information

Tiltmeter comes with a mating connector on a 18-inch (45mm) unterminated neoprene whip. For longer cable specify length and *P/N SO-20/6*.

Starter kit is available for quick startup and operation. Includes 110/220 VAC power transformer and 10 ft (3m) cable with DB9 connector on far end. Specify *Starter Kit*.