

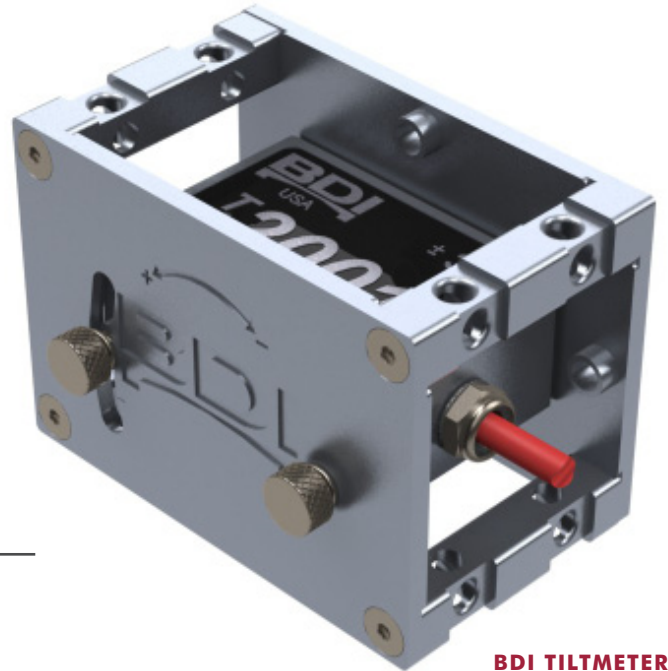
TILTMETER

TILTMETER

The Tiltmeter is an electrolytic tilt sensor and can be used for both short and long term testing applications. These units connect directly to our STS WiFi Wireless testing systems, BDI Dynamic & Structural Monitoring Systems, and are also compatible with most data acquisition systems. The rugged aluminum housings provide both easy mounting and zero-adjusting capabilities.

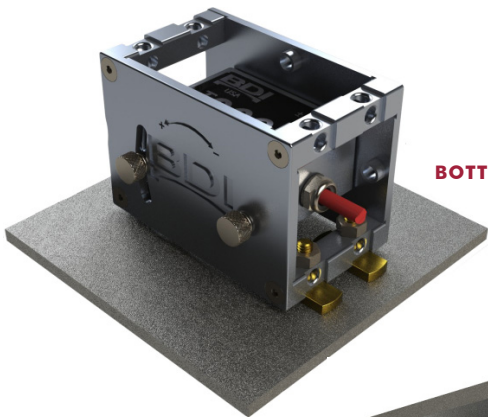
APPLICATIONS

- Rotation in bridge slabs, beams, and piers due to live load
- Rotation in bridge piers over time due to possible scour
- Retaining wall or abutment movement during construction
- Building wall movement due to seasonal weather changes
- Rotation angle of tainter gates during operation

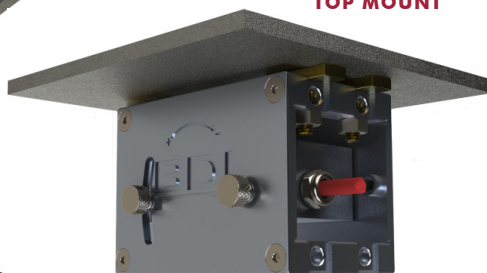


BDI TILTMETER

TILTMETER MOUNTING POSITIONS



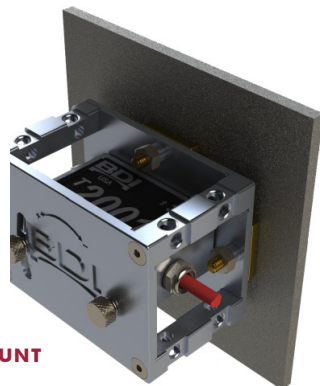
BOTTOM MOUNT



TOP MOUNT



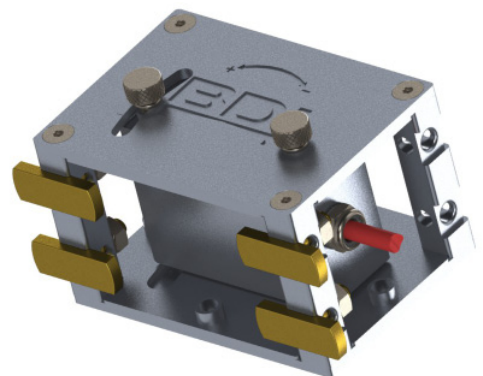
BACK MOUNT



END MOUNT

FEATURES

- Simple & quick range adjustment
- Mounting tabs for adhesive application
- Measurement range from $\pm 0.5^\circ$ to $\pm 60^\circ$
- 4 mounting configurations
- Water and weather resistant to IP67
- High accuracy
- Sub-arc second resolution
- Internal signal conditioning
- Overload protection
- NIST traceable calibration



MODEL	T500-005	T500-030	T500-100	T500-600
LINEAR RANGE (ARC DEGREES)	±0.5	±3	±10	±60
TOTAL RANGE (ARC DEGREES)	±1	±6	±15	±80
OUTPUT (MV/ARC SECOND)	1	0.4	-	-
OUTPUT (MV/ARC DEGREE)	-	-	420	160
RESOLUTION (ARC DEGREES)	<.0001	<.0003	<.0005	<.001
NULL REPEATABILITY (ARC DEGREES)	<.0008	<.0008	<.001	<.02
SYMMETRY @ 1/2 LINEAR SCALE (%)	<2	<2	<2	<2
ACCURACY @ 1/2 LINEAR SCALE (%FS)	-	<2	<2	<0.8
ACCURACY @ FULL SCALE (%FS)	-	<8	<5	<3
NULL IMPEDANCE (KOHMS) +/-20%	1	12	40	8
NULL STABILITY, 12 HRS @ 25 DEG. C (ARC DEG'S, TYP.)	<.005	<.005	<.001	<.005
SETTLEMENT TIME (SECONDS)	~1.1	~1.2	~0.75	~1.0
EXCITATION VOLTAGE	+5 to +15 Vdc			
POWER RATING	MAX: 75mW TYPICAL: 2.5mW @ +5.0Vdc excitation INTELLIDUCER: 13mW @ +5.0Vdc*			
INPUT IMPEDANCE	5 MΩ			
OUTPUT	±1.5Vdc @ 6.0Vdc excitation			
OPERATING TEMPERATURE	-13°F to 158°F (-25°C to 70°C)			
STORAGE TEMPERATURE	-40°F to 176°F (-40°C to 80°C)			
TEMP. COEFFICIENT OF SCALE (%/°C, TYP.)	0.6	0.6	0.1	0.1
CABLE	IC-02-187 (0.187 in diameter, 22awg, 2 pair, shielded with drain wire, red PVC jacket) or IC-02-250 (0.250 in diameter, 22awg, 2 pair, shielded with drain wire, blue PVC jacket)			
HOUSING	6061-Aluminum			
WEATHER PROOFING	IP67			
DIMENSIONS	4.25" x 2.6" x 3" (108 x 66 x 76 mm)			
WEIGHT	1.2 lbs (544 g.)			
MOUNTING	BDI mounting Tabs and adhesive, mechanical connection			

* Intelliducer connectors operate at +5.0 Vdc only.

MEASURE ROTATION AS FUNCTION OF VEHICLE POSITION

