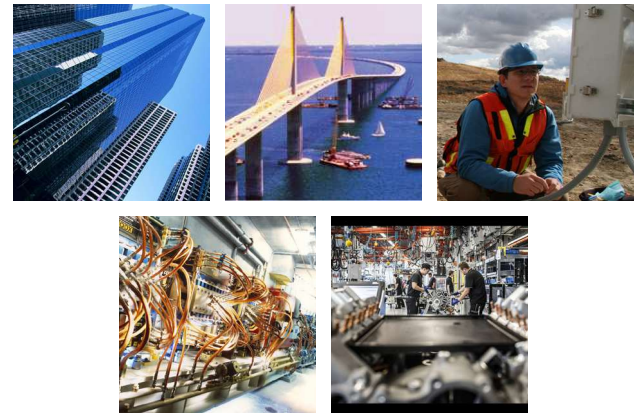
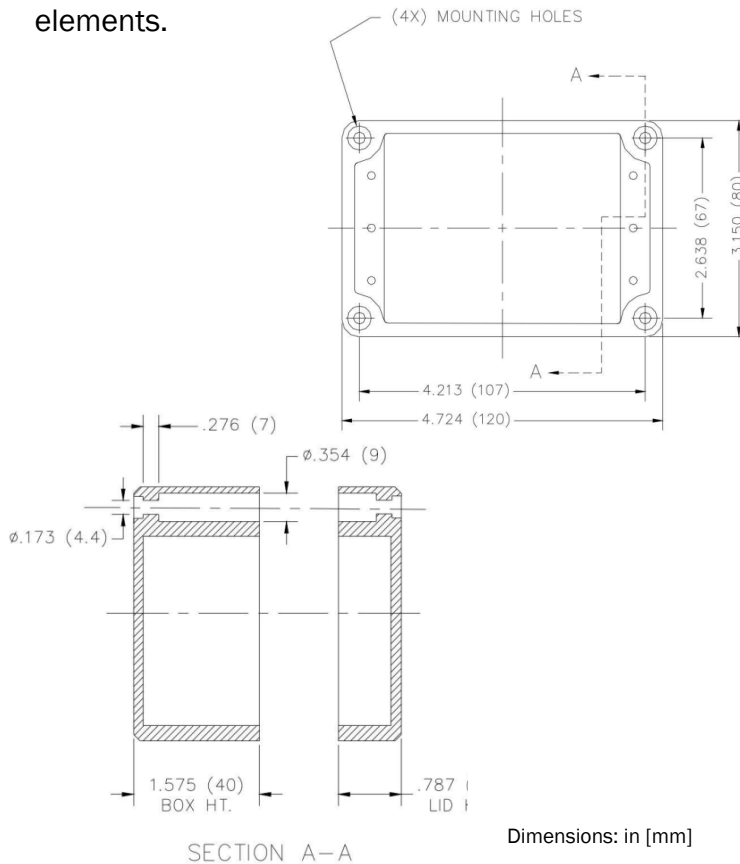


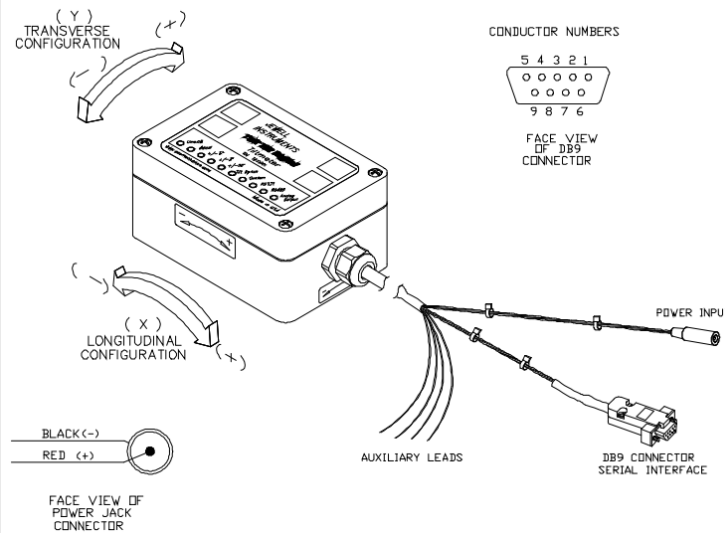
Model D801 "Tuff Tilt" Digital Tiltmeter

The model D801 "Tuff Tilt Digital" is a high performance, digital tiltmeter with advanced firmware features. Units use a gravity referenced electrolytic tilt sensor with superior measurement accuracy and nearly no long-term drift. Output is RS232 or RS422 (RS485 full duplex). Utilizing a 16-bit A/D, the D801 is sensitive to $<0.0001^\circ$ (.0017 mm/m). User programmable firmware controls include sample averaging, auto-zero (tare), baud/output rate, and more. The D801 also includes on-board memory, with storage capacity up to 22,000 samples. All units are rated IP65 waterproof for advanced protection from the elements.



APPLICATIONS:

- Structural Monitoring
- Platform Leveling
- Industrial Measurement & Control



PERFORMANCE SPECIFICATIONS

PERFORMANCE

ANGULAR RANGE (°) ¹	±0.5°	±3°	±50°
RESOLUTION	0.0001°	0.0001°	0.002°
NONREPEATABILITY (° max)	0.0003°	0.0003°	0.004°
NONLINEARITY (%FRO) ² max	0.1		
TIME CONSTANT	0.15 sec		
Kz TEMP COEFFICIENT (°/C)	0.0002 °/°C (typical)		0.004 °/°C (typical)
OUTPUT	RS232, RS422 (RS485 full duplex)		
OUTPUT FORMAT	NMEA XDR, Trimble TCM, Ashtec compatible, Simple (default: X, Y, Temp., S/N)		
BAUD RATE	9600 (default), 19200, 28800, 57600, 115200, 230400		
CHANNELS	X-tilt, Y-tilt, Temperature, Serial No.		

ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	1 or 2
POWER	7-28 VDC @ 30mA, 250 mV ripple max, reverse polarity protected
OPERATING TEMPERATURE RANGE	-40° to +85° C
STORAGE TEMPERATURE RANGE	-40° to +85° C
WEIGHT	0.6 kg (1.5 lb.)
MATERIALS	Diecast painted aluminum
SEAL	IP65
CABLE	3m (10 ft.), 6 conductors + one overall shield, PVC jacket. DB9 connector for digital I/O.

PIN OUT:

RS232 Wiring

WIRE COLOR	FUNCTION	DB9 PIN-OUT
BLACK	GND	5
RED	V+	-
GREEN	-	-
YELLOW	RxD (RS232)	3
WHITE	TxD (RS232)	2
BLUE	-	-

RS422 Wiring

WIRE COLOR	FUNCTION	DB9 PIN-OUT
BLACK	GND	1
RED	V+	-
YELLOW	Rx- (RS422)	9
BLUE	Rx+ (RS422)	8
GREEN	Tx+ (RS422)	4
WHITE	Tx- (RS422)	5

NOTES:

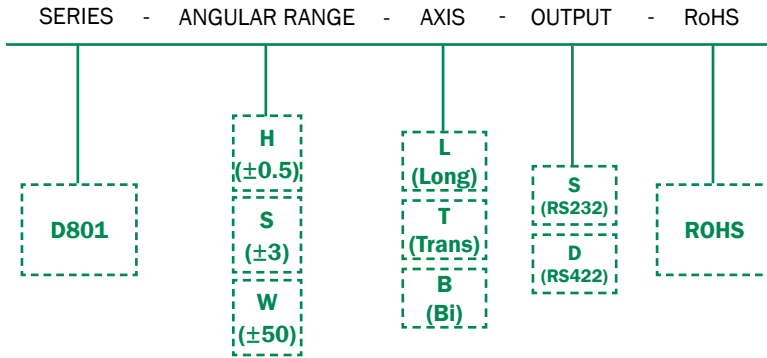
1. Custom ranges available on request
2. Nonlinearity is specified as variation around the best straight line from null to full-range output.

Specifications are subject to change without notice due to continued product development

ORDERING INFORMATION

HOW TO ORDER

Model Numbers are comprised of the series, angular range, axis configuration, output signal and RoHS compliance



Accessories:

PART #	DESCRIPTION
70369	6-conductor cable (specify total length on order)
00254-02	Extra power transformer (100-240VAC to 12VDC)
81439	Mounting bracket for vertical surfaces
84051	Mounting plate for horizontal surfaces

	MODEL #	PART #
±0.5	D801-HL-S	98943-01-ROHS
	D801-HL-D	98943-02-ROHS
	D801-HT-S	98943-03-ROHS
	D801-HT-D	98943-04-ROHS
	D801-HB-S	98943-05-ROHS
	D801-HB-D	98943-06-ROHS
±3	D801-SL-S	98943-07-ROHS
	D801-SL-D	98943-08-ROHS
	D801-ST-S	98943-09-ROHS
	D801-ST-D	98943-10-ROHS
	D801-SB-S	98943-11-ROHS
	D801-SB-D	98943-12-ROHS
±50	D801-WL-S	98943-13-ROHS
	D801-WL-D	98943-14-ROHS
	D801-WT-S	98943-15-ROHS
	D801-WT-D	98943-16-ROHS
	D801-WB-S	98943-17-ROHS
	D801-WB-D	98943-18-ROHS