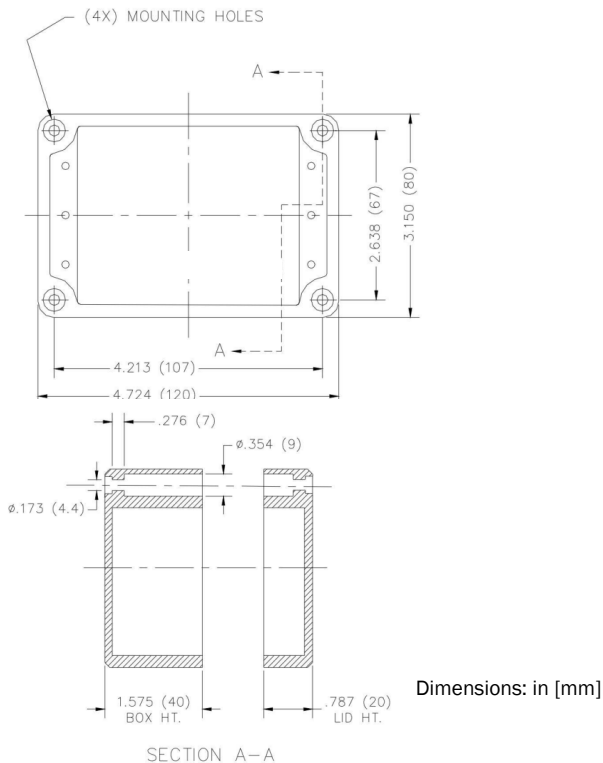


## Model C801

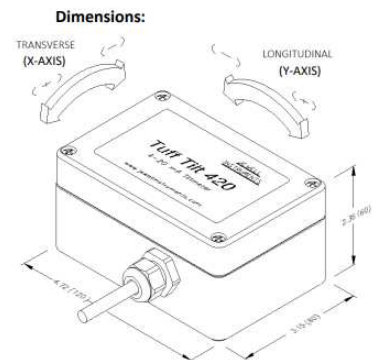
### “Tuff Tilt” Analog Tiltmeter

The model C801 “Tuff Tilt 420” delivers the same precision and durability of our A801, but with 4-20mA output. Units are available in single axis (uniaxial), and dual axis (biaxial) tilt configurations. The Tuff Tilt 420 is current loop powered, so tilt measurements are made using an economical 2-wire pair, and because output is 4-20mA there is no signal loss over long cables. Units also include an on-board thermistor for temperature measurements. All units are rated IP65 waterproof for advanced protection from the elements. Use the C801 for structural monitoring, 4-20mA PLC systems, industrial measurement and control, or anywhere long cable runs are necessary.



#### APPLICATIONS:

- Structural Monitoring
- Platform Leveling
- Industrial Measurement & Control



# PERFORMANCE SPECIFICATIONS

## PERFORMANCE

ANGULAR RANGE (°) <sup>1</sup>	±0.5°	±3°	±50°
RESOLUTION	0.0001°	0.0006°	0.01°
NONREPEATABILITY (° max)	0.0002°	0.001°	0.02°
NONLINEARITY (%FRO) <sup>2</sup> max	1	2	0.5
SCALE FACTOR (SINGLE-ENDED)	0.0625°/mA	0.375°/mA	6.25°/mA
TIME CONSTANT	0.15 sec		
Kz TEMP COEFFICIENT (°/°C)	±0.0002 °/°C (typical)		±0.002 °/°C (typical)
Ks TEMP COEFFICIENT (%/°C)	<0.04%/°C (typical)		<0.1%/°C (typical)
OUTPUT	4-20mA Two-wire current loop (per axis)		
CHANNELS	Tilt, Temperature		

## ELECTRICAL & ENVIRONMENTAL

NUMBER OF AXES	1 or 2
OUTPUT IMPEDANCE (Ohms, nominal)	270
TEMPERATURE OUTPUT	Temperature is measured with a 2500 Ohm thermistor, -50° to 150°C range
POWER	(0.02 Ampere x R + 10 VDC) < Vs < 29 VDC where R is the resistance of the shunt resistor and loop wiring in Ohms. Input current: 25 mA
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 conductor + one overall shield, PVC jacket, tined ends

## PIN OUT:

### Single Axis

WIRE COLOR	FUNCTION
RED	LOOP PWR (V+)
BLACK	LOOP RTRN (GND)
CLEAR	DRAIN
WHITE	TEMP RTRN
BLUE	TEMP EXCITATION
YELLOW	TEMP OUT

### Biaxial

WIRE COLOR	FUNCTION
RED	X LOOP PWR (V+)
BLACK	X LOOP RTRN (GND)
GREEN	Y LOOP PWR (V+)
WHITE	Y LOOP RTRN (GND)
BLUE	TEMP EXCITATION
YELLOW	TEMP OUT
CLEAR	DRAIN

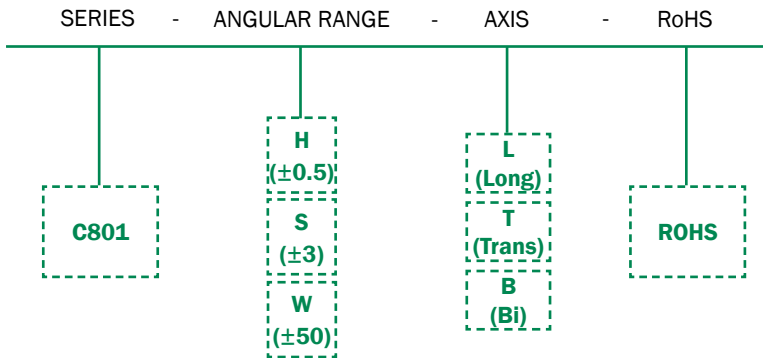
### NOTES:

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, the number of axes, and the angular range.



	MODEL #	PART #
±0.5	C801-HL-ROHS	98008-04-ROHS
	C801-HT-ROHS	98008-01-ROHS
	C801-HB-ROHS	98008-08-ROHS
±3	C801-SL-ROHS	98008-05-ROHS
	C801-ST-ROHS	98008-02-ROHS
	C801-SB-ROHS	98008-09-ROHS
±50	C801-WL-ROHS	98008-06-ROHS
	C801-WT-ROHS	98008-03-ROHS
	C801-WB-ROHS	98008-10-ROHS

## Accessories:

PART #	DESCRIPTION
84051-01	Horizontal Mounting Plate Kit w/Mounting Hardware (See plate dimensions)
81439-01	Vertical Mounting Plate Kit w/Mounting Hardware (see plate dimensions)
602-00013	Extra Mounting Kit (Includes Allen Wrench, four (4) Mounting Studs and Circular Bubble Level)
62204	Optional 6-pin male receptacle (installed on tiltmeter cable)
62101011-001	Optional 6-socket in-line plug (mates to P/N 62204 connector)
70304	Power/signal 10-conductor Cable, 24 AWG, Polypropylene Jacket (Specify total length on order)

850 Perimeter Road Manchester, NH 03103 USA

SENSORS: 800.227.5955

www.jewellinstruments.com | sensors@jewellinstruments.com

© Jewell Instruments 2024

**Jewell**  
Instruments

ISO9001  
CERTIFIED