

Model C801 “Tuff Tilt 420” Tiltmeter

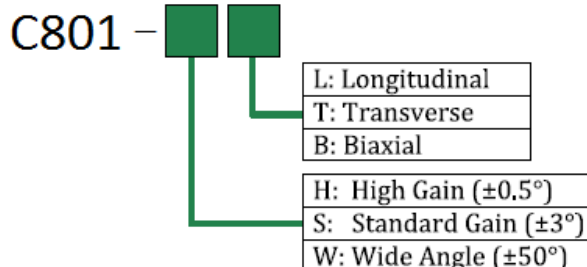
The model C801 “Tuff Tilt 420” delivers the same precision and durability of our A801, but with 4-20mA output. Units are available in single axis (uniaxial), and dual axis (biaxial) tilt configurations. The Tuff Tilt 420 is current loop powered, so tilt measurements are made using an economical 2-wire 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.



	High-Gain	Standard	Wide-Angle
Angular Range	±0.5°	±3.0°	±50°
Resolution	<0.0001°	0.0006°	0.01°
Repeatability	<0.0002°	0.001°	0.02°
Non-Linearity	1%	2%	0.5%
Scale Factor	0.0625°/mA	0.375°/mA	6.25°/mA
Kz Temp Coefficient (deg/C)	±0.0002°/°C (typical)		±0.002°/°C (typical)
Ks Temp Coefficient (%/°C)	<0.04%/°C (typical)		<0.1%/°C (typical)
Time Constant	0.15 sec		
Output	4-20mA Two-wire current loop (per axis)		
Channels	Tilt, Temperature		
Output Impedance	270 ohms		
Temperature Output	0.1°C/mV typical (single ended; 0°C = 0mV)		
Power	(0.02 Ampere x R + 10 VDC) < Vs < 29 VDC		
Environmental	-40 to +85°C operation and storage. IP65		
Dimensions	120 x 80 x 60 mm, 0.5 kg (1.1 lb.)		
Materials	Diecast painted aluminum,		
Cable	3m (10 ft.), 5-conductor + one overall shield, PVC jacket, tinned ends		

Specifications subject to change without notice on account of continued product development

Ordering Code:

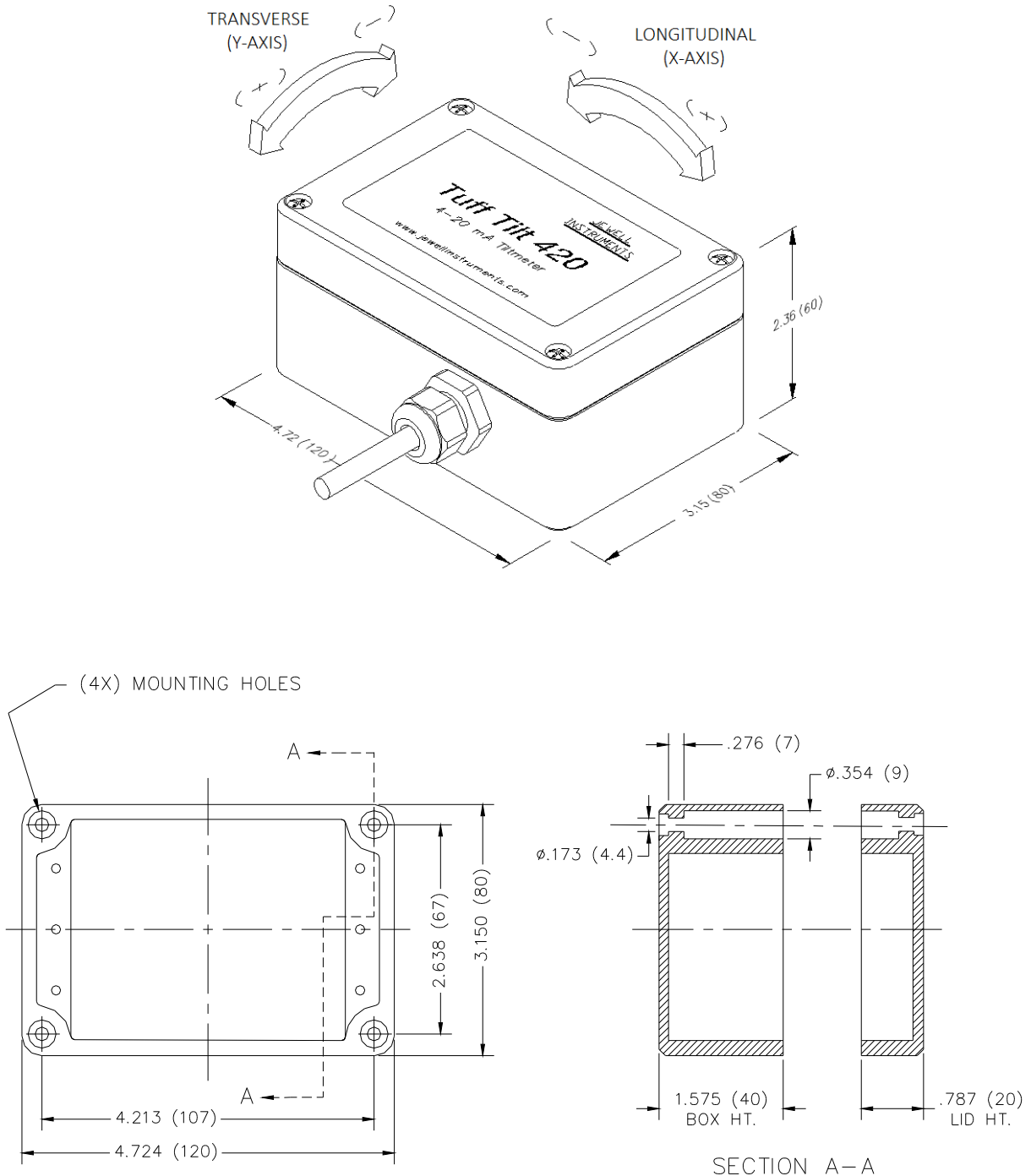


Accessories:

Part No.	Description
81439	Mounting bracket for vertical surfaces
84051	Mounting plate for horizontal surfaces
70369	6-conductor cable (specify total length on order)
62204	Optional 6-pin male receptacle (installed on tiltmeter cable)
62202	Optional 6-socket in-line plug (mates to P/N 62204 connector)

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Dimensions:

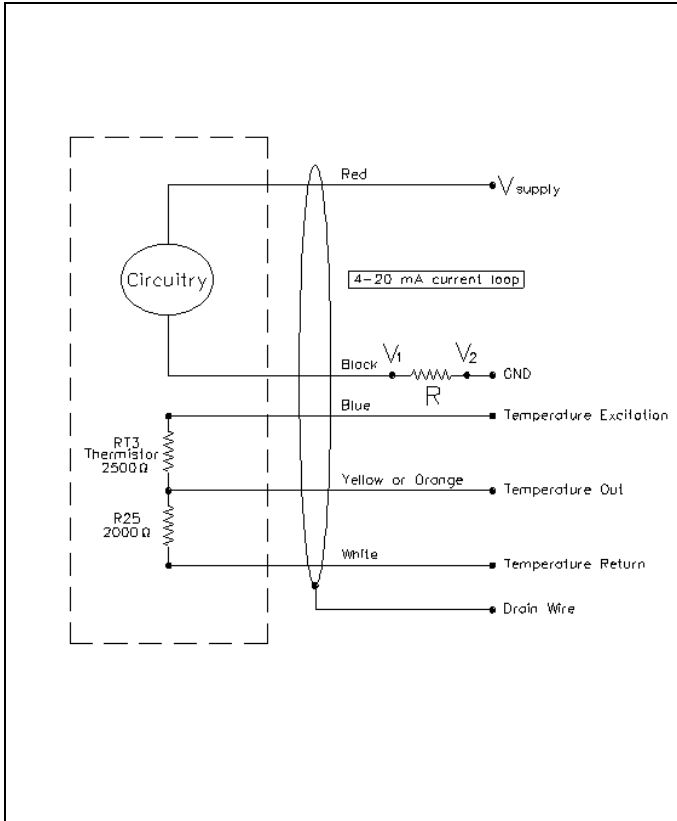


Dimensions in inches (mm)

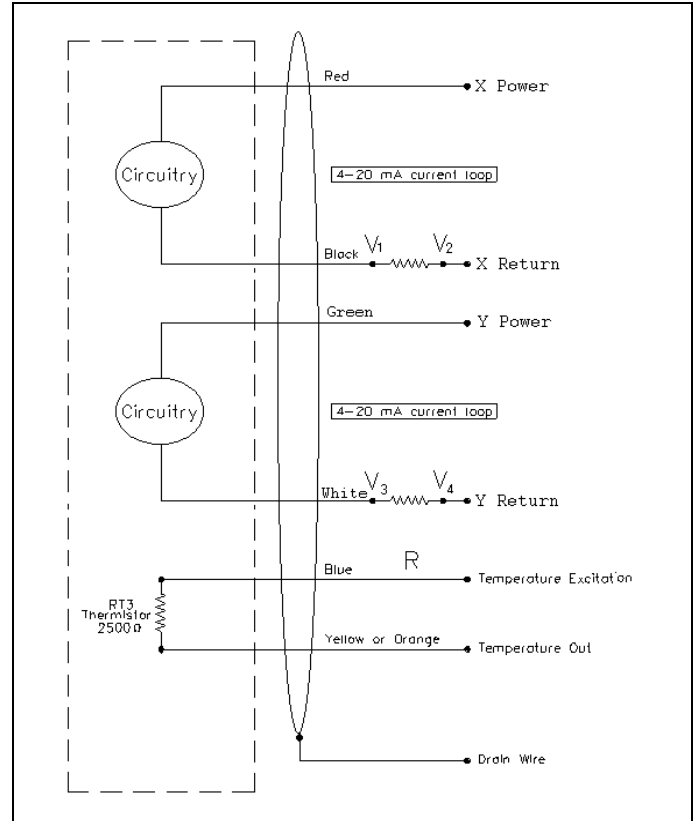
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Circuit Diagram:

Model C801 (Uniaxial Versions)



Model C801 (Biaxial Versions)



Wiring Diagram:

Function	Wire Color (Uniaxial Versions)	Wire Color (Biaxial Versions)
Loop Power (V+)	Red	Red (X), Green (Y)
Loop Return (GND)	Black	Black (X), White (Y)
Temp. Excitation	Blue	Blue
Temp. Out	Yellow	Yellow
Temp. Return	White	Not Connected
Drain	Bare (Clear)	Bare (Clear)