



MODEL TA1 TRUETENSION™ AMPLIFIER



The **TA1 Amplifier** is a compact tension measurement device that is used with DFE tension transducers (load cells) to monitor tension in any zone of web or filament processing machinery.

Digital Quik-Cal™ push-button zero and calibration eliminates analog pot adjustments and associated drift, to make calibrating simple, fast and reliable.

The amplifier boosts a millivolt level return signal from DFE tension transducers (load cells) and outputs isolated 0-10 VDC and 4-20 mA proportional signals that can be connected to PLCs, drives, data loggers or display meters.

Designed to mount in a vertical orientation on a DIN rail, the TA1 can also be quickly converted to screw mount.

Feature rich and low cost with integrated electrical isolation, operating status LED, remote input zero and calibration and Cal A/B functionality. Built-in diagnostic capability quickly identifies faulty load cells, incorrect wiring, calibration issues and amplifier ADC/DAC failure.

Compact size and ease of installation make the TA1 amplifier a natural choice for the OEM or end user seeking strong value in web tension monitoring or control applications.

SPECIFICATIONS

Model: TA1

Power Input:

Voltage: 24 VDC +/- 10%
 Current: 0.1 ADC Typical, Internal Fusing
 PTC Resettable

Tension Amplifier Accuracy:

+/- 1/2 % Drift at Ambient Maximum

Calibration Range: Up to 50:1

Processor: 32 Bit

ADC Resolution: 16,777,216 (24 Bit)

DAC Resolution: 4,096 (12 Bit)

Certifications: CE, UL Listed

Tension Outputs:

Output 1: 0-10 VDC Isolated from 24 VDC
 Input GND
 Output 2: 4-20 mA Isolated from 24 VDC
 Input GND

Temperature Range: 32°F to 122°F (0°C to 50°C)

Dimensions: .89 W x 3.9 H x 4.41 D (inches)
 22.6 W x 99 H x 112 D (mm)

Weight: .25 lbs (114 g)

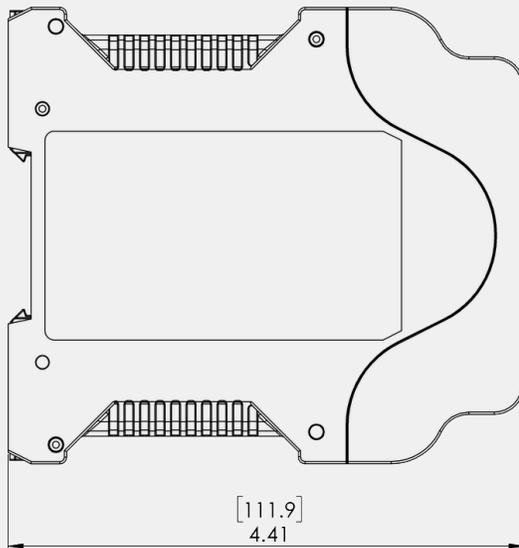
Enclosure:

Polycarbonate with Removable Terminal Blocks

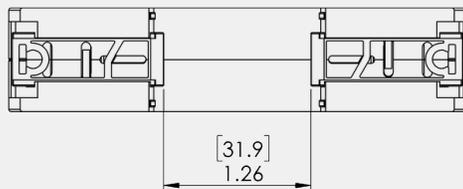
Included Mounting Hardware:

DIN Rail Clip, Screw Prongs

DIMENSIONS



DIN RAIL MOUNT



SCREW MOUNT

