



MODEL **TA500 ECAT** TENSION AMPLIFIER



The TA500 ECAT Tension Amplifier is a compact, single-channel tension transducer interface with EtherCAT® connectivity. It can be used with DFE tension transducers (load cells) to monitor tension in any zone of web or filament processing machinery.

DFE's Quik-Cal™ push-button zero and calibration eliminates pot adjustments and associated drift to make calibrating the TA500 simple, fast and reliable.

Powered by 24 VDC, the amplifier boosts a millivolt-level tension signal from tension transducers (load cells) and provides simultaneous EtherCAT®, 0-10 VDC and 4-20 mA connections to interface with a PLC, drive or display meter.

Built-in diagnostic capability quickly identifies faulty load cells, incorrect wiring, calibration issues and amplifier ADC/DAC failure.

The compact size and diverse integration capabilities of the TA500 amplifier make it a preferred option for OEMs and end-users seeking next-generation monitoring and control solutions in support of Industry 4.0 factory automation initiatives.

FEATURES & BENEFITS

- Simultaneous EtherCAT®, 0-10 VDC and 4-20 mA connectivity
- ESI file support
- Quik-Cal™ push-button zero and calibration enables rapid startup
- Operating status LED
- Built-in diagnostic capability
- Remote zero and calibration
- DIN rail mounting clip
- Flexible signal outputs
- Industry-leading 5 year tension-free warranty
- Improves machine operation and productivity by making it simple and economical to run proper tension
- Low-cost, high-quality device for reliable stand-alone tension measurement or use with advanced closed-loop control systems
- Built-in diagnostic capability reduces troubleshooting time and frustration
- Calibration and Button Lockout

SPECIFICATIONS

Model: TA500-ECAT

Power Input:

Voltage: 24 VDC +/- 10%

Current: 0.15 Amps DC Typical, Internal Fusing PTC Resettable

Tension Amplifier Accuracy:

+/- 1/2% Drift at Ambient Maximum

Host Processor: 32 Bit

ADC Resolution: 24 Bit (16 Bit effective)

DAC Resolution: 4,096 (12 Bit)

Tension Outputs:

Output 1: 0-10 VDC Isolated from 24 VDC Input GND

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

Calibration Range: Up to 50:1

Temperature Range: 32°F to 104°F (0°C to 40°C)

Dimensions: 94.22mm x 25.76mm x 94.10mm

Weight: .25 lbs (114g)

Certifications:  

EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

DIMENSIONS

