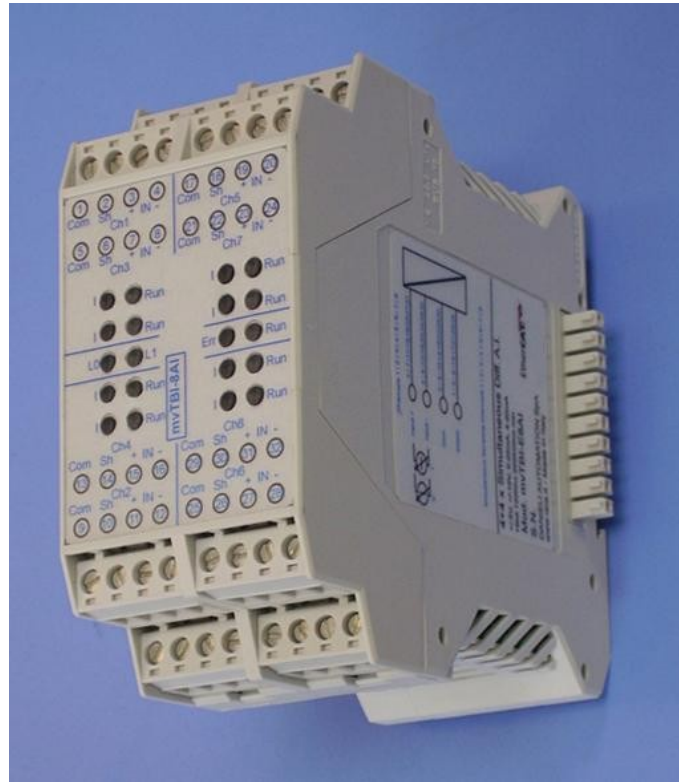


mvTBI-E8AI

Analog Input EtherCAT Terminal



Features

- 8 independent Analog input channels
- Voltage ranges : 0-5V, 0-10V, $\pm 5V$, $\pm 10V$
- Current ranges: 0-20mA, 4-20mA, $\pm 20mA$
- All of the odd and all of the even channels acquired simultaneously
- Software configurable (mailbox message)
- Inputs can be disabled by software
- 15-bit resolution for unipolar inputs
- 16-bits two's complement resolution for bipolar inputs
- 1000 volt isolation
- Inputs factory calibrated
- Fully compatible with EtherCAT protocol

Applications

- Slide wires
- Analytical equipment
- Microphones
- RTDs and thermistors
- Temperature transmitters
- Strain gauges and load cells

Overview

The **mvTBI-E8AI** Analog Input EtherCAT terminal is a powerful, 15-bit Analog Input.

This terminal provides your EtherCAT system with the capability of acquire voltage or current signals over any of 8 independent analog input channels. Each channel can be separately configured via software for a variety of voltage or current input operations.

In the **mvTBI-E8AI** all of the odd inputs and all of the even inputs are acquired simultaneously.

The **mvTBI-E8AI** provides isolation up to 1000 volts.

The terminals are factory calibrated to obtain a really thin overall error.

Hardware Specifications	Environmental Specifications
<p>Number of Channels 8</p> <p>Isolation 1000 V</p> <p>Resolution</p> <p> Bipolar Input 16 bits two's complement</p> <p> Unipolar Input 15 bits</p> <p>Accuracy ±0,1% FSR max</p> <p>Voltage Input Characteristics</p> <p>Available Ranges</p> <p> Bipolar Input ± 5V, ± 10V</p> <p> Unipolar Input 0-5V, 0-10V</p> <p>Input Resistance > 200 kΩ</p> <p>Current Input Characteristics</p> <p>Available Ranges</p> <p> Bipolar Input ±20mA</p> <p> Unipolar Input 0-20mA, 4-20mA</p> <p>Input Resistance 50 Ω</p> <p>Conversion Time 10 μs</p> <p><i>(Conversion Time is defined as the time required to start a conversion. It is measured from the analog input changing to the availability for master module).</i></p> <p>Power Requirements</p> <p>E-Bus 5V, 330 mA typ. With all channels set for current inputs</p> <p>Field 24V ±5%, 60mA typ.</p> <p>Dimensions</p> <p>Height 99 mm</p> <p>Width 45 mm</p> <p>Depth 114,5 mm</p> <p>Mounting</p> <p>On 35mm mounting rail conform to EN 50022</p>	<p>Temperature</p> <p>Operating 0° to 65° C (32° to 149° F)</p> <p>Non operating -40° to 85° C (-40° to 185° F)</p> <p>Humidity 20 to 95% RH, non-condensing</p> <p>Altitude</p> <p>Operating Sea level to 10,000 ft. (3048m)</p> <p>Non operating Sea level to 40,000 ft. (12192m)</p> <p>Vibration</p> <p>Operating 5 to 2,000 Hz</p> <p> .015" (.38 mm) peak-to-peak displacement</p> <p> 2.5g (maximum) acceleration,</p> <p>Nonoperating 5 to 2,000 Hz</p> <p> .030" (.76 mm) peak-to-peak displacement</p> <p> 5.0 g (maximum) acceleration,</p> <p>Shock</p> <p>Operating 30 g peak acceleration</p> <p> 11 msec duration</p> <p>Nonoperating 50 g peak acceleration</p> <p> 11 msec duration</p> <p>EtherCAT Compliance</p> <ul style="list-style-type: none"> - IEC 61158-2-12 - IEC 61158-3-12 - IEC 61158-4-12 - IEC 61158-5-12 - IEC 61158-6-12 - EtherCAT Slave Device Description Documentation <p>Warranty</p> <p>The mvTBI-E8AI carries a one-year warranty.</p> <p>Ordering Information</p> <p>mvTBI-E8AI : 8-Channel Analog Input Module</p>

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