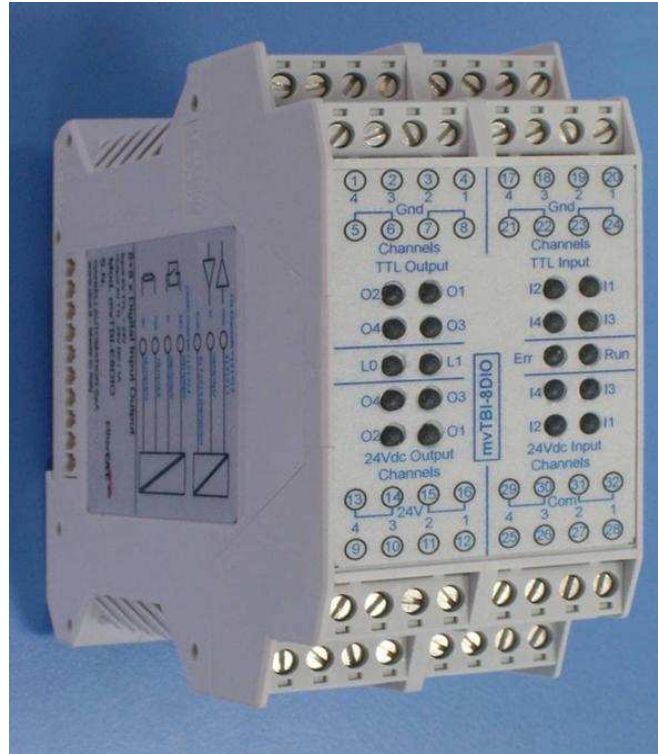


mvTBI-E8DIO

Digital I/O EtherCAT Terminal



Features

- 8 digital output channels
- 8 digital input channels
- Output channels updated simultaneously
- Voltage input/output ranges: 0-5V, 0-24V
- 0-5V I/O's available with both Totem-Pole and Open Collector logic
- Software configurable (output process image)
- Both 5V and 24V I/O insulated each other
- 1000V isolation
- Fully compatible with EtherCAT protocol

Applications

Outputs

- Control valves
- Solid-state relays
- Alarm interface
- Indicator lamps

Inputs

- Push buttons or panel switches
- Limit switches
- Proximity switches
- Alarm trips
- Photo detector switches

Overview

The **mvTBI-E8DIO** Digital Input/Output EtherCAT terminal is a powerful, 16 channels Digital Input/Output module.

This terminal provides your EtherCAT system with the capability of 8 digital output and 8 digital input channels, 4 of which available with ranges of 0-5V (TTL level) and 4 available with ranges of 0-24V. Each Input and Output @ TTL level may be individually configured via software for Totem-Pole or Open Collector logic way by writing a specific value in *InConfig* (to configure inputs) or/and in *OutConfig* (to configure outputs) fields in the output process image.

The **mvTBI-E8DIO** supports simultaneous output updating.

The two voltage groups (0-5V and 0-24V) are insulated each other.

The **mvTBI-E8DIO** provides isolation up to 1000 volts.

Hardware Specifications	Environmental Specifications
<p>Output Characteristics</p> <p>Number of Channels @ 24V 4</p> <p>Number of Channels @ 5V 4</p> <p>Switching time:</p> <ul style="list-style-type: none"> – ON @ 5V 5 μs max. – OFF @ 5V 20 μs max. – ON @ 24V 50 μs max. – OFF @ 24V 60 μs max. <p>Output current max. (per channel)</p> <ul style="list-style-type: none"> – @ 5V 350 mA – @24V 0.7 A <p>Input Characteristics</p> <p>Number of Channels @ 24V 4</p> <p>Number of Channels @ 5V 4</p> <p>Switching time:</p> <ul style="list-style-type: none"> – ON @ 5V 5 μs max. – OFF @ 5V 40 μs max. – ON @ 24V 5 μs max. – OFF @ 24V 40 μs max. <p>Input current max. (per channel)</p> <ul style="list-style-type: none"> – @ 5V 250 μA – @24V 10 mA <p>Isolation 1000 V</p> <p>Power Requirements</p> <p>E-Bus 5 V, 130 mA typ. with I/O at high logic level</p> <p>Field 24 V\pm5%, 80 mA typ. with I/O at high logic level</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 .015" (.38 mm) peak-to-peak displacement 2.5g (maximum) acceleration,</p> <p>Nonoperating 5 to 2,000 Hz .030" (.76 mm) peak-to-peak displacement 5.0 g (maximum) acceleration,</p> <p>Shock</p> <p>Operating 30 g peak acceleration 11 msec duration</p> <p>Nonoperating 50 g peak acceleration 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-E8DIO carries a one-year warranty.</p> <p>Ordering Information</p> <p>mvTBI-E8DIO: 8 input channels + 8 output channels.</p>