

# I16S

## 16x3 line input module on EtherCAT bus

### **Electrical characteristics**

- Supply voltage: +5 V +/- 5% 100 mA without encoder
- MTBF: 70 000 h 50 °C

### **Mechanical characteristics**

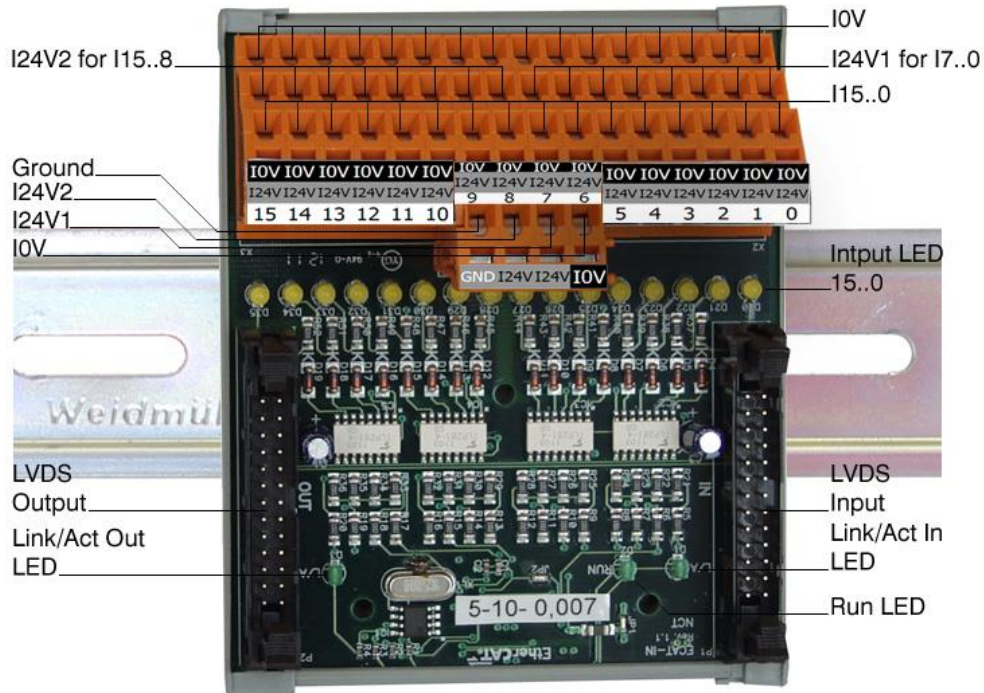
- Dimensions: 88×108×72 mm
- Weight: kg

### **Environmental characteristics**

- Operating temperature: +0 °C ... +50 °C
- Storage temperature: -24 °C ... +85 °C
- Operating relative humidity: max. 95% (no condensation)
- Storage relative humidity: max. 95% (no condensation)
- Sea-level altitude: -300 m ... +3000 m
- Shock resistance: 15 g / 0,33 ms
- Vibration: 1 g/5 ... 2000 Hz

### **EMC**

- EN 61000-4-2 (ESD)
- EN 61000-4-4 (burst)
- EN 61000-4-10 (voltage drop, interruption, change)



## Description

### 1. Digital inputs

The I16S is able to receive 16 input signals (I0 ... I15) of nominal 24 VDC. Each line has galvanic isolation and LED indication (Input LED 0 ... 15), too.

The values of the digital inputs can be read out via EtherCAT (LVDS) bus.

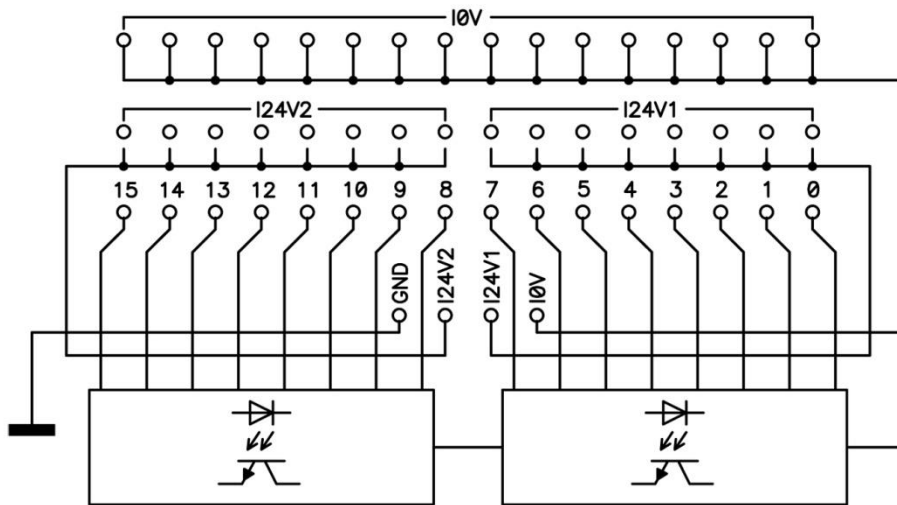
Low (0): 0 ... 10 VDC

High (1): 15 VDC ... 30 VDC

On the terminals of the module, each input has 24 VDC and 0 VDC connection options. This simplifies the connection of units that require 24 VDC power supply in addition to the input signal.

Two separate 24 VDC power supplies (I24V1 és I24V2) can be provided for the module; separately for the first 8 inputs and separately for the second 8 inputs.

The unit can be connected (grounded) to the frame at the GND point.



## 2. EtherCAT electronics

It is the EtherCAT-LVDS bus via which the module communicates with the control system. The module must be connected to the EPU unit or to a module connected to the EPU unit already, via the LVDS input. The LDSS output connector can be used to connect a subsequent module.

### The LEDs on the card and their functions

Link/Act In: the EtherCAT input port works

Link/Act Out: the EtherCAT output port works

Run: when the LED light is off: the unit is in INIT status

when the LED light is blinking: the unit is in PRE-OPERATIONAL status

when the LED light flashes: the unit is in SAFE-OPERATIONAL status

when the LED light is on: the unit is in OPERATIONAL status