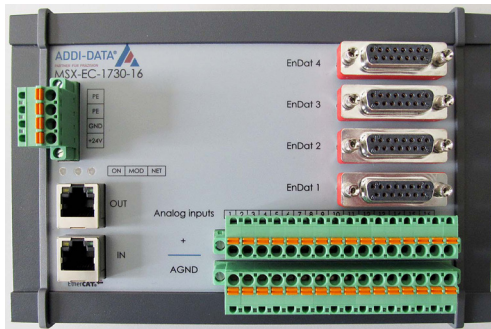


EtherCAT multifunction counter system

4 EnDat 2.2 counter inputs

New!*



MSX-EC-1730

4 EnDat 2.2 counter inputs

8/16 analog inputs, SE, 16-bit

4/8 analog inputs, differential, 16-bit

Voltage or current inputs

Fast distributed data acquisition



EtherCAT



*Operating temperature



TWINCAT

Features

- Robust standardised metal housing
- Power save mode: Reduced power consumption if no acquisition runs

EnDat 2.2 counter inputs

- 4 inputs, galvanically isolated
- Integrated voltage supply
- Transmission frequency: 2 MHz, data up to 56 bits can be transferred

Analog inputs

- 8/16 single-ended inputs, 4/8 differential inputs, 16-bit
- Acquisition frequency: 5 kHz (fixed)
- Input range: ± 1 V, ± 2 V, ± 5 V, ± 10 V (software-programmable)
- Current inputs (optional)

Acquisition modes

- Untriggered live signal
- Acquisition synchronised with the EtherCAT master

Applications

- Industrial measurement and monitoring
- Industrial process control
- Remote diagnosis
- Control of chemical processes • Factory automation

Interfaces

- EtherCAT (IN/OUT ports)
- 24 V supply

Specifications

EnDat 2.2 counter inputs

Number of channels:	4 inputs
Galvanic isolation:	1000 V
Supply voltage:	5 V, 120 mA max. per female connector
Transmission frequency:	2 MHz, data up to 56 bits can be transferred

Analog inputs

Number/type:	8/16 single-ended inputs 4/8 differential inputs
Resolution:	16-bit (bipolar), 15-bit (unipolar)
Relative precision (INL):	± 3 LSB max. (ADC)
Galvanic isolation:	1000 V
Input range:	± 1 V, ± 2 V, ± 5 V, ± 10 V (software-programmable)
Acquisition frequency:	5 kHz (fixed)
Gain:	x1, x2, x5, x10 (software-programmable)
Common-mode rejection:	80 dB min., DC up to 60 Hz (differential amplifier)
Input impedance (PGA):	$10^9 \Omega$ // 10 nF relating to GND
Bandwidth (-3 dB):	160 kHz (limited by low-pass filter)

Power supply

Nominal voltage:	24 V
Supply voltage:	18-36 V
Galvanic isolation:	1000 V

Current consumption at 24 V:	210 mA
Reverse polarity protection:	1 A max.

EMC - Electromagnetic compatibility

The product complies with the European EMC directive. The tests were carried out by a certified EMC laboratory in accordance with the standard DIN EN IEC 61326-1. The limit values as set out by the European EMC directive for an industrial environment are complied with. The respective EMC test report is available on request.

System features

Interface:	EtherCAT
Dimensions:	232 x 121 x 31 mm
Weight:	850 g
Degree of protection:	IP 40
Operating temperature:	-40 °C to +85 °C

Interface connectors

EtherCAT:	2 x 8-pin RJ45 connector
Voltage supply	
24 VDC input:	1 x 4-pin MSTBA connector (Phoenix Contact)

Sensor connectors

EnDat 2.2 counter inputs:	4 x 15-pin D-Sub female connector
Analog inputs:	2 x 16-pin MSTBA connector (Phoenix Contact)

MSX-EC-1730

EtherCAT multifunction counter system, 4 EnDat 2.2 counter inputs, 8/16 single-ended or 4/8 differential analog inputs, 16-bit.
Incl. technical description and software drivers.

Versions

- MSX-EC-1730-8-SE:** 4 EnDat 2.2 counter inputs, 8 analog inputs (SE)
- MSX-EC-1730-16-SE:** 4 EnDat 2.2 counter inputs, 16 analog inputs (SE)
- MSX-EC-1730-4-Diff:** 4 EnDat 2.2 counter inputs, 4 analog inputs (diff.)
- MSX-EC-1730-8-Diff:** 4 EnDat 2.2 counter inputs, 8 analog inputs (diff.)

Options

Please indicate the number of channels!

- Option SF:** Precision filter for 1 analog input channel (SE)
- Option DF:** Precision filter for 1 analog input channel (diff.)
- Option PC:** Current input 0(4)-20 mA for 1 analog input channel
- PC-SE:** for single-ended **PC-Diff:** for differential

* Preliminary product information