

DEVICE SPECIFICATIONS

ECAT-E300-MASTER

Industrial Controller

This document provides the specifications for the **ECAT-E300-MASTER**. Specifications are subject to change without notice.

Characteristics/Nominal Specifications describe basic functions and attributes of the device established by design.

Physical Characteristics



Caution You can impair the protection provided by the **ECAT-E300-MASTER**

if you use it in a manner not described in this document.

To clean the **ECAT-E300-MASTER**, wipe it with a dry towel.

Dimensions	10.6 cm × 8.5 cm × 3.0 cm
Weight	0.45 Kg(0.99 lbs)

Processor

Type	Quad Core Intel Atom Processor E3845
Frequency	1.91 GHz
On-die L2 cache	2 MB

Operating System

Supported Operating Systems	Labview Real-Time, Labview EtherCAT
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vLabview™

Memory

System RAM	
Capacity	4 GB
Type	DDR3L
Speed	1333 MT/s

Storage

Capacity	32 GB SSD mSATA
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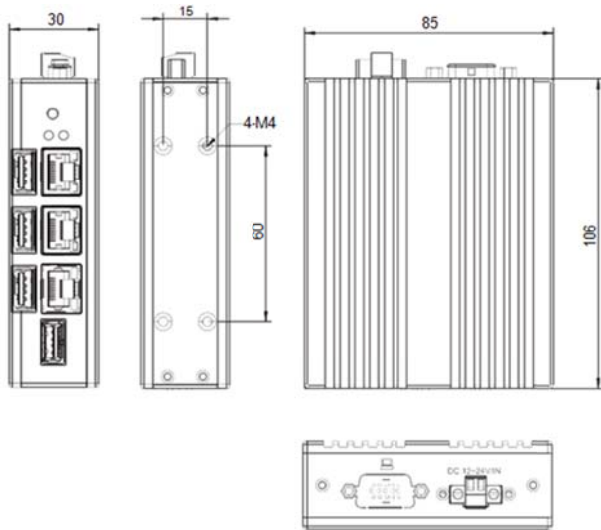
Power Requirements



Note Supply voltages are measured at the **ECAT-E300-MASTER** power connectors.

System Power (V)	
Supply voltage	10.8 to 26.4 VDC
Maximum power input	24 W

Device Dimension (mm)



Device Color

Device color

Silver

Device DIN-Rail Type



Labview EtherCAT Softmotion Device Interface

Global Softmotion Brand

Kollmorgen(Full Support)

Bosch-Rexroth

Copley Controls

Delta

Dunkermotoren,

Elmo

Maxon

Mitsubishi

Panasonic

Sanyo Denki

Schneider Electric

Yaskawa

Parker

Network Port

Standard	IEEE 802.3 Ethernet, 10BASE-T, 100BASE-TX, 1000BASE-T
Interface	RJ45x3
Speed	10, 100, 1000 Mbps

USB 2.0 Ports

Number of ports	3
Type	USB 2.0, Hi-Speed
Speed	480 Mbit/s
Maximum current	1 A, shared across both ports

USB 3.0 Ports

Number of ports	1
Type	USB 3.0, Hi-Speed
Speed	640 Mbit/s
Maximum current	1 A, shared across both ports

Input protection		
Reverse polarity protection	Yes, -30 V Input voltage (channel to C _{ISO})	30 V
maximum		
Input current	3.3 mA, internally limited	

Environmental

Indoor use only.

Operating temperature	0 °C to 55 °C
Storage temperature	-20 °C to 85 °C
Relative humidity	10% to 90%, noncondensing

Pollution Degree	2
Maximum Altitude	2,000 m
Operating shock (IEC 60068-2-27)	50 g, 3 ms half sine, 3 shocks per side 30 g, 11 ms half sine, 3 shocks per side
Operating vibration	
Random (IEC 60068-2-34)	10 to 500 Hz, 5 G _{rms}
Swept Sine (IEC 60068-2-6)	10 to 500 Hz, 5 g

Safety

This product is designed to meet the requirements of the following electrical equipment safety standards for measurement, control, and laboratory use:

- IEC 61010-1, EN 61010-1
- UL 61010-1, CSA 61010-1



Note For UL and other safety certifications, refer to the product label or the [Online Product Certification](#) section.

Electromagnetic Compatibility

This product meets the requirements of the following EMC standards for electrical equipment for measurement, control, and laboratory use:

- EN 61326-1 (IEC 61326-1): Class A emissions; Industrial immunity
- EN 55011 (CISPR 11): Group 1, Class A emissions
- EN 55022 (CISPR 22): Class A emissions
- EN 55024 (CISPR 24): Immunity
- AS/NZS CISPR 11: Group 1, Class A emissions
- AS/NZS CISPR 22: Class A emissions
- FCC 47 CFR Part 15B: Class A emissions
- ICES-001: Class A emissions



Note In the United States (per FCC 47 CFR), Class A equipment is intended for use in commercial, light-industrial, and heavy-industrial locations. In Europe, Canada, Australia and New Zealand (per CISPR 11) Class A equipment is intended for use only in heavy-industrial locations.



Note Group 1 equipment (per CISPR 11) is any industrial, scientific, or medical equipment that does not intentionally generate radio frequency energy for the treatment of material or inspection/analysis purposes.



Note For EMC declarations and certifications, and additional information

Waste Electrical and Electronic Equipment (WEEE)



EU Customers At the end of the product life cycle, all products must be disposed of according to local laws and regulations

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Battery Directive This device contains a long-life coin cell battery. If you need to replace it, use the Return Material Authorization (RMA) process or contact an authorized National Instruments service representative. For more information about compliance with the EU Battery Directive 2006/66/EC about Batteries and Accumulators and Waste Batteries and Accumulator