

# Network Converter

## EtherCAT Compatible NETC01-ECT

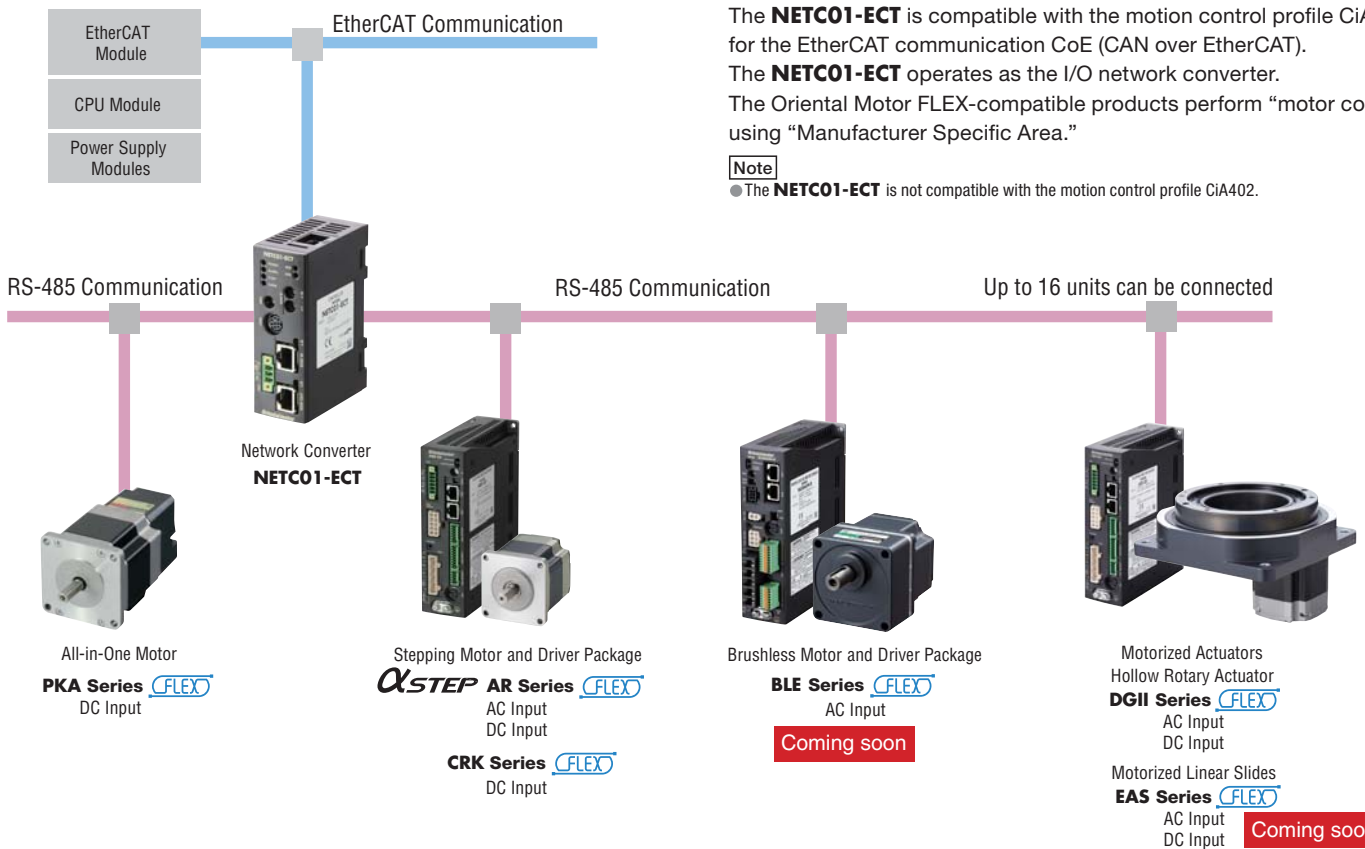
EtherCAT 



The EtherCAT network converter **NETC01-ECT** is a device that converts from an EtherCAT communication to Oriental Motor's own RS-485 communication protocol. By using the **NETC01-ECT** network converter, Oriental Motor's entire „FLEX“-compatible products can be controlled within an EtherCAT communications environment.

„FLEX“ is the generic name for products that are used for I/O control, Modbus (RTU)/RS-485 control or a network converter. Flex products enable easy connection, and reduce the complexity of system configuration.

### Features

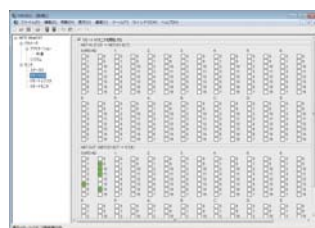


### Simple Setting and Easy Monitoring

The **NETC01-ECT** can be set via EtherCAT communication or using the control module **OPX-2A** (sold separately) or data setting software **MEXE02**. The **OPX-2A** and **MEXE02** can be used for monitoring remote I/O or remote register.



Control Module **OPX-2A**



Data Setting Software **MEXE02**

### ESI File

The ESI file is available for the **NETC01-ECT**, EtherCAT gateway controller. Please contact us for further information. For the **NETC01-ECT** installation and connection information, see the operator's manual.

The following items are included in each product.  
Network Converter, RS-485 Communication Cable, Power Supply Connector, Operating Manual

## Specification

### Power Supply Input

24 VDC  $\pm$ 10% Current Consumption 0.2 A

### EtherCAT Specification NETC01-ECT

Item	Description
Baud Rate	100 Mbps
Communication Period	Subject to the setting of the master device
Node Address	0~255 (00h~ FFh, initial value: 01h)
Maximum Number of Byte	300 bytes
Communication Protocol	EtherCAT dedicated protocol (CoE), profile type: CiA301 compatible
Communication Cable	Category 5 straight cable (shielded twisted cable)

### RS-485 Specification

Item	Description
Electrical Characteristics	EIA-485 compliance, straight cable Twisted-pair wire (TIA/EIA-568B CAT5e or greater recommended) is used up to a total extension length 50 m.
Communication Mode	Half duplex communication, asynchronous mode (data: 8 bits, stop bit: 1 bit, parity: none)
Baud Rate	625,000 bps
Protocol	Frame size: 10 bytes (fix), binary transmission
Maximum Number of Connectable Units	16 units

## General Specification

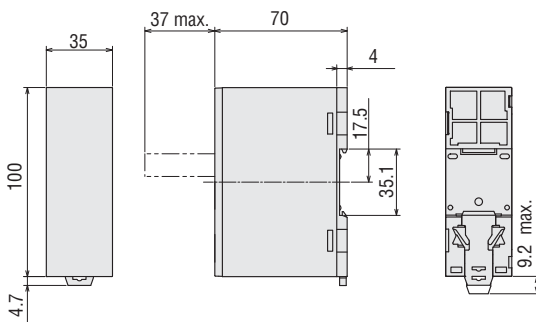
Item	Description	
Insulation Resistance	100 M $\Omega$ min when measured with a 500 VDC megger is applied between the following locations: · FG terminal – power supply terminal	
Dielectric Strength	Sufficient to withstand 500 VAC, 50 Hz or 60 Hz applied between the following places for 1 minute: · FG terminal – power supply terminal	
Operating Environment (In Operation)	Ambient Temperature	0~+ 40°C (non-freezing)
	Ambient Humidity	85% max. (non-condensing)
	Altitude	Max. of 1000 m above sea level
	Atmosphere	No corrosive gasses, dust, water or oil.
Storage, Transportation Environment	Ambient Temperature	-25 ~+ 70°C (non-freezing)
	Ambient Humidity	85% max. (non-condensing)
	Altitude	Max. of 3000 m above sea level
	Atmosphere	No corrosive gasses, dust, water or oil.

#### Note

Do not measure insulation resistance or perform the dielectric strength test while the motor and driver are connected.

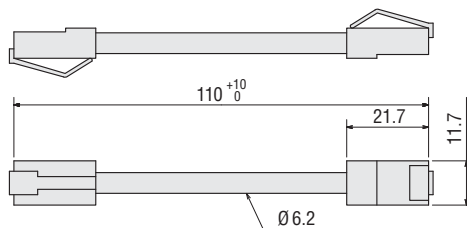
## Dimensions Unit = mm

NETC01-ECT Mass: 0.15 kg



### Accessories (Included)

#### RS-485 Communication Cable



#### Power Supply Connector

Connector: MC1,5/3-STF-3,5 (PHOENIX CONTACT GmbH & Co. KG)

EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

These products are manufactured at plants certified with the international standards ISO 9001 (for quality assurance) and ISO 14001 (for systems of environmental management).

Specifications are subject to change without notice.  
Published in May 2013.

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