



ECAT-2016 series Quick Start

v1.1, Jan. 2021

Packing List

In addition to this guide, the package includes the following items:



ECAT-2016N/2016-3

Technical Support

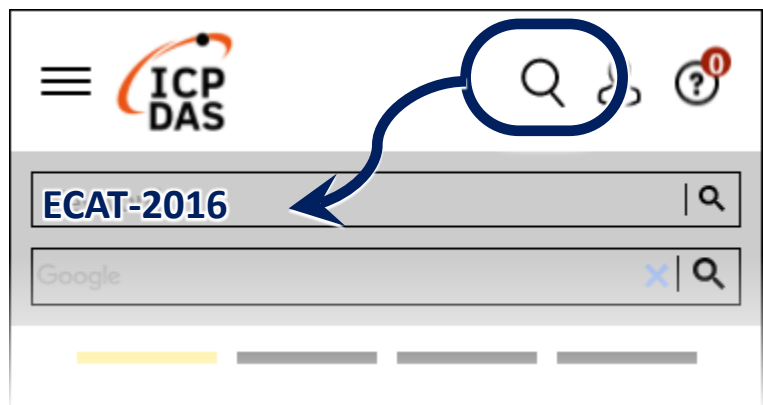
service@icpdas.com

www.icpdas.com

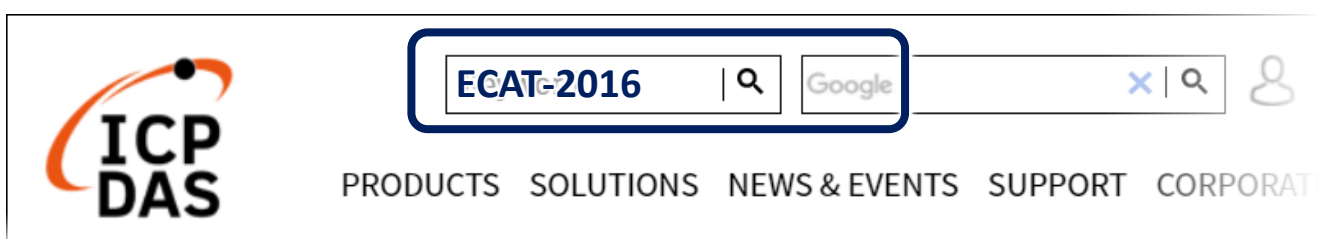
Resources

How to search for ESI, manuals and spec information on ICP DAS website.

- For Mobile Web



- For Desktop Web



Related Information

For more detailed information related to the manual, hardware manual:

<http://www.icpdas.com/en/download/index.php?model=ECAT-2016N>

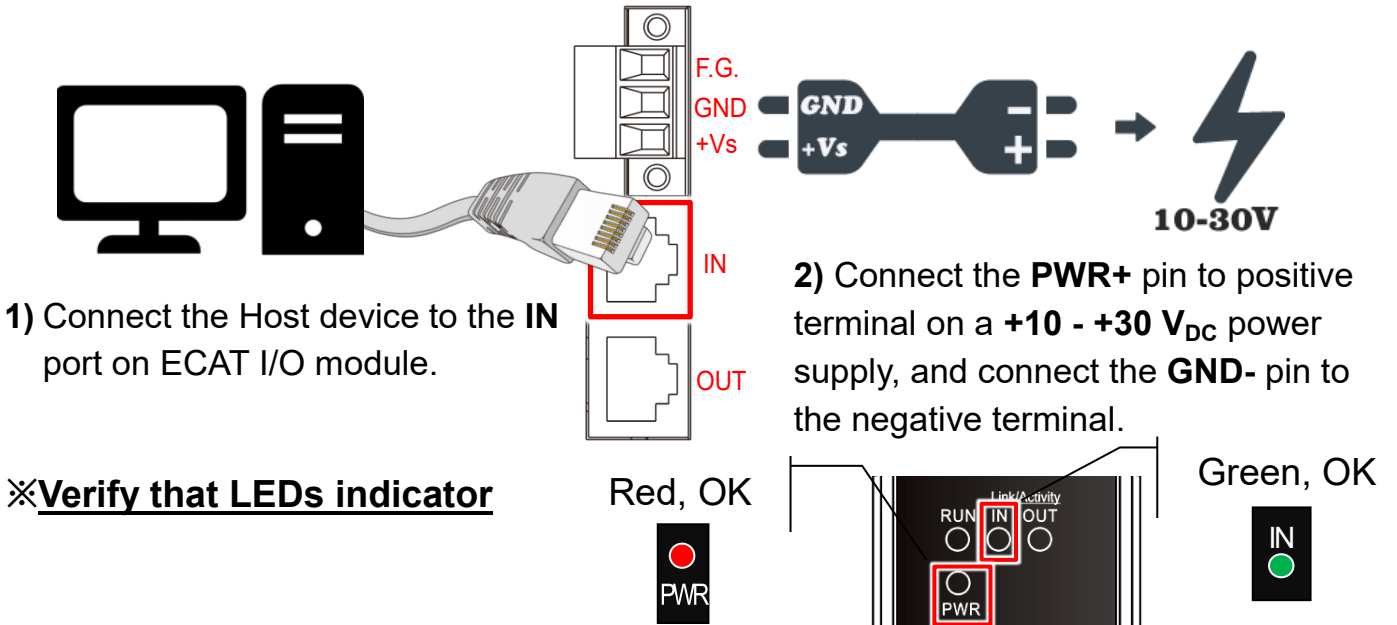
<http://www.icpdas.com/en/download/index.php?model=ECAT-2016-3>

1 Connecting the Power and Host

※Switch on module and connect it to an EtherCAT network

! NOTE:

Attaching an ESC directly to an office network will result in network flooding, since the ESC will reflect any frame – especially broadcast frames – back into the network (broadcast storm).



2 Search Modules

ESI file

The latest ESI file (ECAT-2016....xml) can be downloaded from website at

[ECAT-2016 Series EtherCAT Slave Information\(ESI\).xml](#)

Install the ESI file

Copy the “ECAT-2016....xml” file to the Master Tools installation folder, as indicated in the table below.

Software	Default Path
Beckhoff EtherCAT Configuration	C:\EtherCAT Configurator\EtherCAT
Beckhoff TwinCAT 3.X	C:\TwinCAT\3.x\Config\lo\EtherCAT
Beckhoff TwinCAT 2.X	C:\TwinCAT\lo\EtherCAT

Run the EtherCAT Master software (Beckhoff TwinCAT 2.X)

Switch on power and execute the TwinCAT System Manager (Config mode)

1. I/O Devices → Right click → Scan Devices...

2. Click “OK” button

3. Choose the correct network device which is connected to ECAT Module and click “OK” button

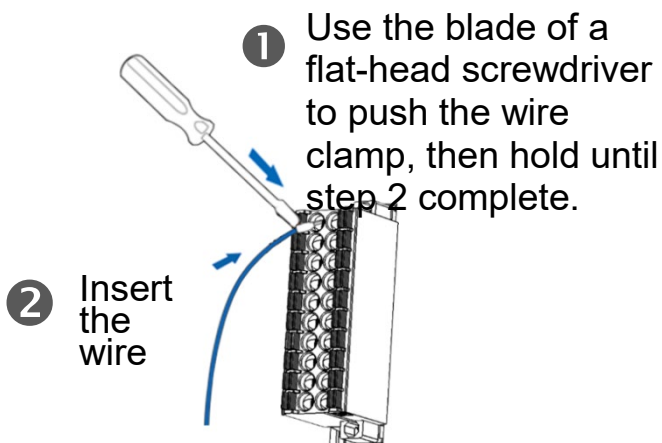
4. Click “OK” to start scanning
Click “OK” to activate the free run mode for TwinCAT system manager

5. In the left-hand window, **ECAT Module** is now shown in the TwinCAT system Manager

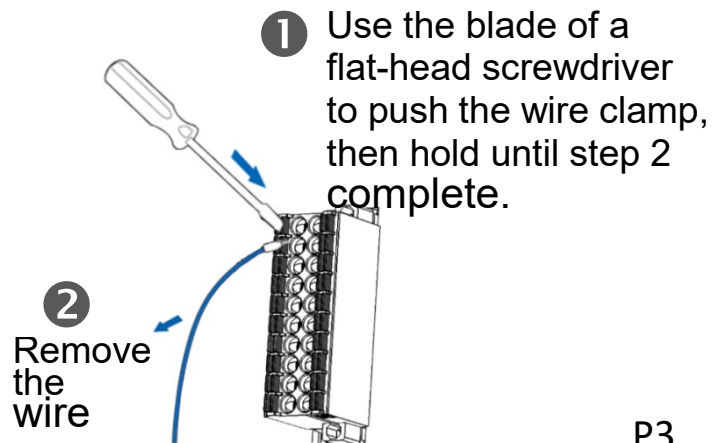
3 Wiring to the Connector

➤ Wiring Tip

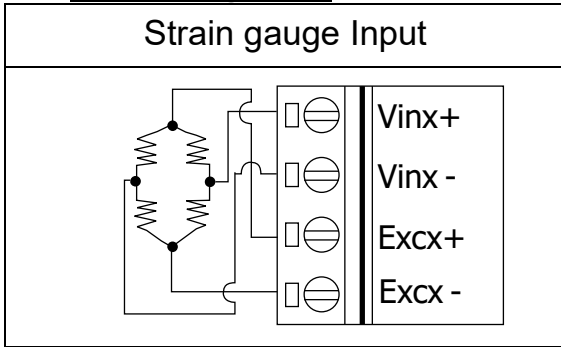
Connecting the wire



Removing the wire

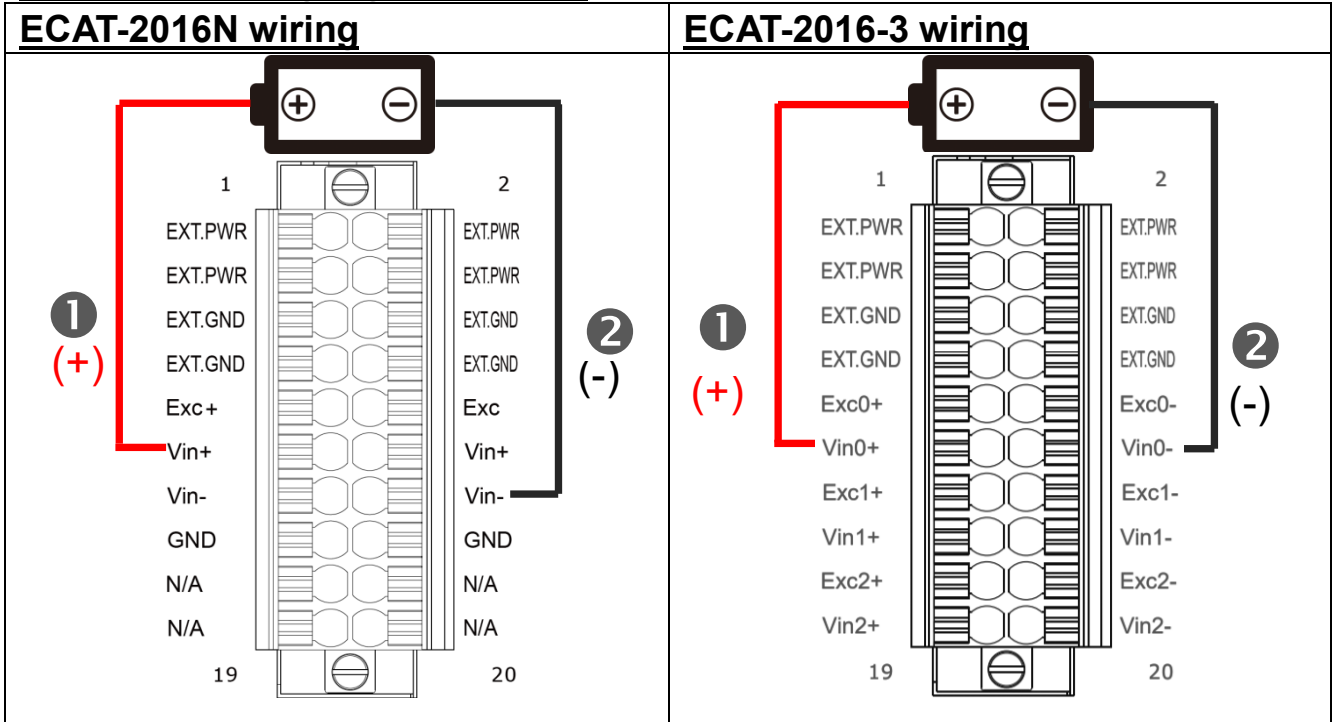


➤ Wire Diagrams



NOTE : Use Stable Signal Source (e.g., Dry Battery)

➤ Connect Strain gauge channel 0



➤ Verifying the Strain gauge Functionality

Name	Online	Type	Size
↑ Status	n=8000 (32768)	Status_4096	2.0
↑ Value	0x0D2E <1.030>	INT	2.0

2. In the right-hand window, check the voltage value in the “Value” item.

1. Click “AI0” in the left-hand window.