

## Beckhoff TwinCAT 3 ADS/AMS (Ethernet)

Supported Series:

CX8000, CX90x0, CX1010, CP62xx, CX5010, CP62xx, CX1020, CX2020, CPxxxx, C6920, CX2030, CPxxxx, CP6930, CX2040, C65xx, C69xx.

Website: <http://infosys.beckhoff.com/>

### HMI Settings:

| Parameters      | Recommended                           | Options         | Notes |
|-----------------|---------------------------------------|-----------------|-------|
| <b>PLC type</b> | Beckhoff TwinCAT 3 ADS/AMS (Ethernet) |                 |       |
| <b>PLC I/F</b>  | Ethernet                              |                 |       |
| <b>Port no.</b> | 48898                                 |                 |       |
| <b>ADS port</b> | 851                                   | 851,852,853,854 |       |

### Device Address:

| Bit/Word | Device | Format   | Range       | Memo  |
|----------|--------|----------|-------------|-------|
| B        | IX     | DDDDDDdd | 0 ~ 6553515 | *Note |
| B        | QX     | DDDDDDdd | 0 ~ 6553515 | *Note |
| B        | MX     | DDDDDDdd | 0 ~ 6553515 |       |
| B        | IX_Bit | DDDDDDo  | 0 ~ 65537   | *Note |
| B        | QX_Bit | DDDDDDo  | 0 ~ 65537   | *Note |
| B        | MX_Bit | DDDDDDo  | 0 ~ 65537   |       |
| W        | IW     | OOOOOO   | 0 ~ 65535   | *Note |
| W        | QW     | DDDDDD   | 0 ~ 65535   | *Note |
| W        | MW     | DDDDDD   | 0 ~ 65535   |       |
| W        | ID     | DDDDDD   | 0 ~ 65535   | *Note |
| W        | QD     | DDDDDD   | 0 ~ 65535   | *Note |
| W        | MD     | DDDDDD   | 0 ~ 65535   |       |

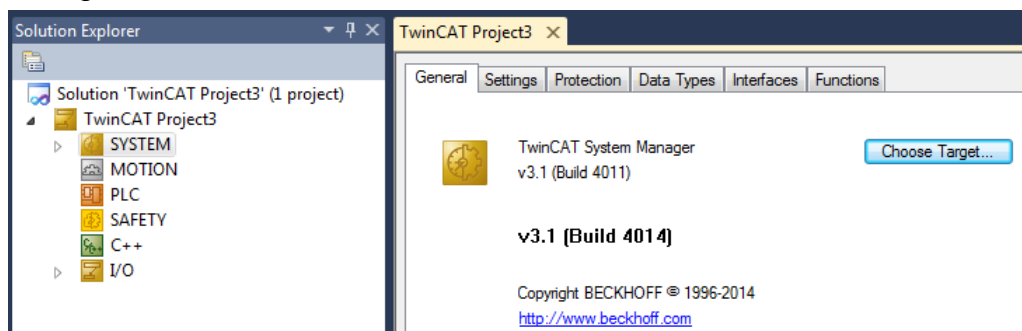
Note: The I addresses and Q addresses are mapped to M addresses. To use I addresses or Q addresses, please use Beckhoff TwinCAT PLC – Free Tag Names (Ethernet) driver instead.

## TwinCAT 3 PLC Settings:

To connect Beckhoff devices, HMI's information must be registered to PLC first. The following steps describe how to register HMI's information into Beckhoff devices.

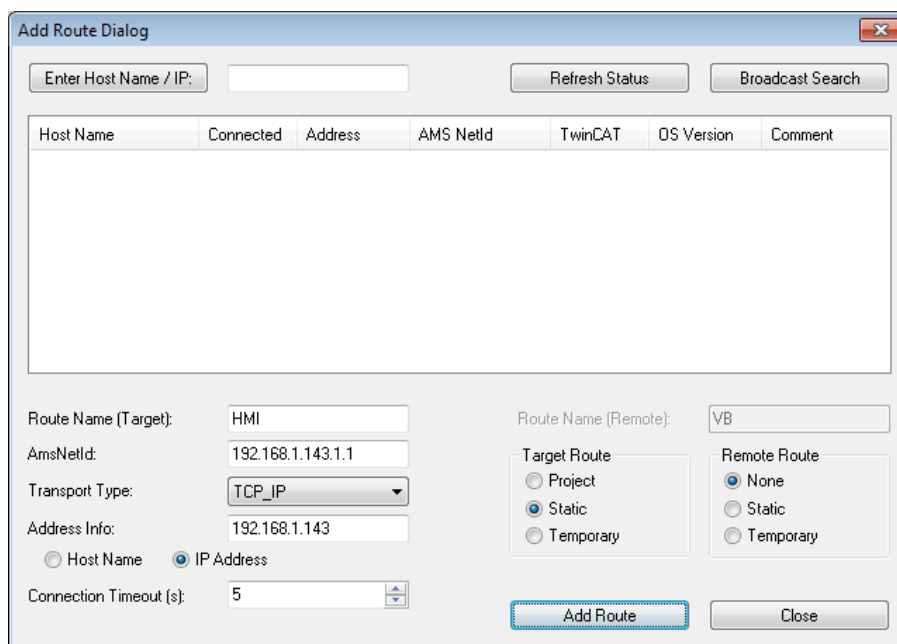
### Step1.

Double click [SYSTEM], and then select [Choose Target System]. Select the device you are connecting.



### Step2.

Expand the SYSTEM layer, select [Routes]. Click [Add] to add HMI information as below.



Name: A user-defined name

AMS Net ID: must be HMI's IP address + ".1.1"

Transport Type: TCP\_IP

Address: HMI's IP address

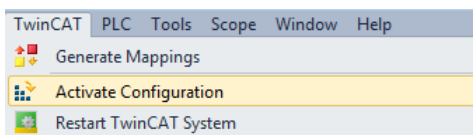
### Step3.

If added successfully, you will see a new item in Remote Computers. Click [Apply] to apply the configuration.

| Current Routes |                   |               |        |         |
|----------------|-------------------|---------------|--------|---------|
| Static Routes  |                   |               |        |         |
| Route          | AmsNetId          | Address       | Type   | Comment |
| 192.168.1.141  | 192.168.1.141.1.1 | 192.168.1.141 | TCP_IP |         |
| HMI            | 192.168.1.143.1.1 | 192.168.1.143 | TCP_IP |         |

### Step4.

Select [TwinCAT] menu, and then select [Activate Configuration] to apply the new settings.



## Wiring Diagram:

Ethernet cable:

