

Beckhoff TwinCAT 3 ADS/AMS (Ethernet)

Supported Series:

CX8000,CX90x0,CX1010,CP62xx,CX5010,CP62xx,CX1020,CX2020,CPxxxx,C6920,CX2 030,CPxxxx,CP6930,CX2040,C65xx,C69xx.

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

HMI Settings:

Parameters	Recommended	Options	Notes
PLC type	Beckhoff TwinCAT 3 AI		
PLC I/F	Ethernet		
Port no.	48898		
ADS port	851	851,852,853,854	

Device Address:

Bit/Word	Device	Format	Range	Memo
В	IX	DDDDDdd	0 ~ 6553515	*Note
В	QX	DDDDDdd	0 ~ 6553515	*Note
В	MX	DDDDDdd	0 ~ 6553515	
В	IX_Bit	DDDDDo	0 ~ 65537	*Note
В	QX_Bit	DDDDDo	0 ~ 65537	*Note
В	MX_Bit	DDDDDo	0 ~ 65537	
W	IW	000000	0 ~ 65535	*Note
W	QW	DDDDD	0 ~ 65535	*Note
W	MW	DDDDD	0 ~ 65535	
W	ID	DDDDD	0 ~ 65535	*Note
W	QD	DDDDD	0 ~ 65535	*Note
W	MD	DDDDD	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.

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

Add Route Dialog					×
Enter Host Name / IP:]	Refresh Status		Broadcast Search
Host Name	Connected Address	AMS NetId	TwinCAT	OS Version	Comment
Route Name (Target):	НМІ]	Route Name (Remo	ote): VB	
AmsNetId:	192.168.1.143.1.1	j	Target Route	Rei	mote Route
Transport Type:	TCP_IP -]	Project	۲	None
Address Info:	192.168.1.143	Ĩ	Static Temporary		Static Temporary
🔘 Host Name 🛛 💿 I	P Address		U · · · · · pordij		
Connection Timeout (s):	5	- Hereit	Add Route		Close

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.

urrent Routes	Static Routes Project Ro	outes NetId Mana	gement	
Route	AmsNetId	Address	Туре	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.

Twin	CAT	PLC	Tools	Scope	Window	Help	
🚔 Generate Mappings							
ы ?	Activate Configuration						
*	Restart TwinCAT System						

Wiring Diagram:

Ethernet cable:

W/Orange WiOrang Orange 2 Orange W/Green 3 WiGre Blue 4 Blue W/Blue 5 WiBlue Green 6 Green W/Brown 7 W/Bros Brown 8 Brown