

Mitsubishi MELSEC-Q/L - ASCII Mode (Ethernet)

Supported Series: Mitsubishi Q series (Q03UDE, Q04UDEH, Q06UDEH, Q10UDEH, Q13UDEH, Q20UDEH, Q26UDEH, Q002UD), Mitsubishi L series(L02, L26-BT), MELSEC-Q/L protocol application to CPU of Ethernet interface or Ethernet module. Website: <u>http://www.mitsubishi-automation.com</u>

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi MELSE	C-Q/L - ASCII Mode (Ethernet)	
PLC I/F	Ethernet		
Port no.	4999	1025 to 4999 or 5010 to 65534	
Network	0	0.255	
number	0	0~235	
PLC sta. no.	255	255	
Protocol	ТСР	TCP / UDP	MC Protocol

Online simulator

[Remote Password Setting]

YES

Set a remote password and a target connection in the engineering tool, and write the data to the CPU module.

Navigation Window => [Parameter] => [Remote Password] => [Remote Password Setting] Screen

			System Parar	meter Settings		
Cellular Da	ata Network	Printer/Ba	ckup Server	Time Sync./DST	e-Mail	Recipe Database
Device	Model	General	System Settir	Extended Memory		
Device list:						What's my IP
			Device	Settings		× Station
Loca	Nam	e : Mitsubishi F	X5U - Binary Mode	(Ethernet)		C
			 Device 			
			IP Addres	ss Settings		
	Remote F	IP address Port no. Password Settin	: 192 . 168 : 4999 g ✔Enable	. 1 . 111		
		Password	1: 1234			



PLC Setting:

WE!NTEK

MITSUBISHI Q/L series Ethernet module setting:

Note1: Check "Enable online change (FTP, MC protocol)"

Note2: If using QJ71E71 module, please refer to MITSUBISHI QJ71E71 connection guide.

Q Parameter Setting
PLC Name PLC System PLC File PLC RAS Boot File Program SFC Device I/O Assignment Multiple CPU Setting Built-in Ethernet Port Setting
IP Address Setting Input Format DEC IP Address 192 168 3 39 Subnet Mask Pattern Image: Subnet Mask Pattern Image: Subnet Mask Pattern Image: Subnet Mask Pattern Default Router IP Address Image: Subnet Mask Pattern Image: Subnet Mask Pattern Image: Subnet Mask Pattern
Communication Data Code C Binary Code C Binary Code C ASCII Code C Enable online change (FTP, MC Protocol) Disable direct connection to MELSOFT Disable direct connection to MELSOFT C Do not respond to search for CPU (Built-in Ethernet port) on network
IP packet transfer setting IP packet transfer setting Set if it is needed(Default / Changed)
Print Window Print Window Preview Acknowledge XY Assignment Default Check End Cancel



- 1. Protocol: TCP or UDP
- 2. Open System: MC Protocol
- 3. Host Station: 1025 to 4999 or 5010 to 65534

Built-in Ethernet Port Open Setting								
IP Address/Port No. Input Format DEC 💌								
	Protocol	Open System		TCP Connection	Host Station	Destination IP Address	Destination Port No.	Start Device to Store Predefined Protocol
1	TCP 🗸	MC Protocol	•	-	4999			
2	TCP 🗸	MC Protocol	Ŧ	-	4998			
3	TCP 🗸	MC Protocol	•	-	4997			
4	TCP 🗸	MC Protocol	Ŧ	-	4996			
5	UDP 🚽	MC Protocol	•	-	4995			
6	UDP 🗸	MC Protocol	•	-	4994			
7	UDP 👻	MC Protocol	•	-	4993		1	
8	UDP 👻	MC Protocol	•	-	4992			
9	TCP 👻	MELSOFT Connection	•	-				
10	TCP 🗸	MELSOFT Connection	•	-				
11	TCP 🗸	MELSOFT Connection	•	-				
12	TCP 👻	MELSOFT Connection	•	-				
13	TCP 🗸	MELSOFT Connection	•	-				
14	TCP 👻	MELSOFT Connection	•	-				
15	TCP 👻	MELSOFT Connection	•	-				
16	TCP 👻	MELSOFT Connection	•	•				
16 TCP MELSOFT Connection IP Address and Port No. will be displayed by the selected format. Please enter the value according to the selected number. Image: Cancel								

Import Tags:

The Mitsubishi Ethernet tag import accepts symbol files with extension "csv" created by the Mitsubishi GX Works2 (Not from GX Developer).

The ".csv" file can be exported from the Project tree.

- 1. Right-click on the Global variable list that need to be exported.
- 2. Select "Write to CSV File ... "
- 3. Select the file name and location.





4. Open EasyBuilderPro -> System Parameter Settings

5. Click "Import Tags..."

					anne cer a	ettinge			
Cellular Data Network Printer/Backup Ser					Server	erver Time Sync./DS			e-Mail
Device	ce Model General System		Re	emote Security		Extended Memory			
evice list:								1	What's my IP?
	Na	me			Location	Device Ty	/pe		Ir
Local HM	I Lo	cal HMI			Local	eMT3105	6 (800 x 600)		-
Local Dev	ice 4 Mi	tsubishi I	MELSEC-Q/L	- ASCII Mode	Local	Mitsubish	MELSEC-Q/L	- ASCII Mode	(Ethernet) E
ĸ									>
¢			New Dev	ice/Server		Delete		Settin	}

- 6. Select the CSV File.
- 7. Check the imported tags.

Address tag name	 Address mode 	address	Comment
✓ Test_Bool	Bit	X-0	123
 Test_Word 	Word	D-0	321

8. Import tag information ssuccessfully.





Device Address:

Bit/Word	Device type	Format	Range	Memo
В	SM	DDDD	0 ~ 2047	Special Relay
В	Х	НННН	0 ~ 1fff	Input Relay
В	Υ	НННН	0 ~ 1fff	Output Relay
В	М	DDDDD	0 ~ 61439	Internal Relay
В	L	DDDDD	0 ~ 32767	Latch Relay
В	F	DDDDD	0 ~ 32767	Annunciator
В	V	DDDDD	0 ~ 32767	Edge Relay
В	В	НННН	0 ~ efff	Link Relay
В	TS	DDDDD	0 ~ 25471	Timer Contact
В	ТС	DDDDD	0 ~ 25471	Timer Coil
В	SS	DDDDD	0 ~ 25471	Retentive Timer Contact
В	SC	DDDDD	0 ~ 25471	Retentive Timer Coil
В	CS	DDDDD	0 ~ 25471	Counter Contact
В	CC	DDDDD	0 ~ 25471	Counter Coil
В	SB	НННН	0 ~ 7fff	Special Link Relay
В	S	DDDD	0 ~ 8191	Step relay
В	DX	НННН	0 ~ 1fff	Direct Input
В	DY	НННН	0 ~ 1fff	Direct Output
В	D_Bit	DDDDDDh	0 ~ 999999f	Data Register bit
В	SD_bit	DDDDh	0 ~ 2047f	Special register Bit
В	ZR_bit	DDDDDDh	0 ~ 999999f	File Register Bit
В	R_bit	DDDDDh	0 ~ 32767f	File Register Bit
В	SW_bit	HHHh	0 ~ 7fff	Special Link Register Bit
В	W_bit	HHHHHh	0 ~ 3fd7fff	Link Register Bit
W	SD	DDDD	0 ~ 2047	Special register
W	D	DDDDDD	0 ~ 999999	Data Register
W	W	НННННН	0 ~ 3fd7ff	Link Register
W	TN	DDDDD	0 ~ 25471	Timer Current value
\\/	SN	חחחח	$0 \sim 25471$	Retentive Timer Current
			0~23471	value
W	CN	DDDDD	0 ~ 25471	Counter Current value
W	SW	ННН	0 ~ 7ff	Special Link Register
W	Z	DD	0 ~ 20	Index Register
W	R	DDDDD	0 ~ 32767	File Register
W	ZR	DDDDDD	0 ~ 999999	File Register



Note: Each model of CPU is different, it is recommended to refer to MITSUBISHI MELSEC-Q Manual Device List.

Wiring Diagram:

Ethernet cable:

