

# MITSUBISHI MELSEC-Q Ethernet

MITSUBISHI Q series (Q03UDE, Q04UDEH, Q06UDEH, Q10UDEH, Q31UDEH, Q20UDEH, Q26UDEH), MELSEC-Q protocol application to CPU of Ethernet interface or Ethernet module.

<http://www.mitsubishi-automation.com>

## HMI Setting:

Parameters	Recommend	Option	Notes
PLC type	MITSUBISHI MELSEC-Q		
Com port	Ethernet		
PLC Station No.	255		
Parameter1	1		Networking no.
TCP/IP port	It must same as the PLC setting		Advice to set port no.: 4999

## Device address:

Bit/Word	Device Type	Format	Range	Memo
B	SM	dddd	0 ~ 2047	Special Relay
B	X	hhhh	0 ~ 1FFF	Input Relay
B	Y	hhhh	0 ~ 1FFF	Output Relay
B	M	dddd	0 ~ 61439	Internal Relay
B	L	dddd	0 ~ 32767	Latch Relay
B	F	dddd	0 ~ 32767	Annunciator
B	V	dddd	0 ~ 32767	Edge Relay
B	B	hhhh	0 ~ EFFF	Link Relay
B	TS	dddd	0 ~ 25471	Timer Contact
B	TC	dddd	0 ~ 25471	Timer Coil
B	SS	dddd	0 ~ 25471	Retentive Timer Contact
B	SC	dddd	0 ~ 25471	Retentive Timer Coil
B	CS	dddd	0 ~ 25471	Counter Contact
B	CC	dddd	0 ~ 25471	Counter Coil
B	SB	hhhh	0 ~ 7FFF	Special Link Relay
B	S	dddd	0 ~ 8191	Step relay
B	DX	hhhh	0 ~ 1FFF	Direct Input
B	DY	hhhh	0 ~ 1FFF	Direct Output
B	D_bit	ddddddd(h)	0~4184063F	Data Register Bit

Bit/Word	Device Type	Format	Range	Memo
B	SD_bit	dddd(h)	0~2047F	Special register Bit
B	ZR_bit	hhhhhh(h)	0~3FD7FFF	File Register Bit
B	R_bit	dddd(h)	0~32767F	File Register Bit
B	SW_bit	hhh(h)	0~7FFF	Special Link Register Bit
B	W_bit	hhhhhh(h)	0~3FD7FFF	Link Register Bit
W	SD	dddd	0 ~ 2047	Special register
W	D	ddddddd	0 ~ 4184063	Data Register
W	W	hhhhh	0 ~ 3FD7FF	Link Register
W	TN	dddd	0 ~ 25471	Timer Current value
W	SN	dddd	0 ~ 25471	Retentive Timer Current value
W	CN	dddd	0 ~ 25471	Counter Current value
W	SW	hhh	0 ~ 7FF	Special Link Register
W	Z	dd	0 ~ 20	Index Register
W	R	dddd	0 ~ 32767	File Register
W	ZR	hhhhh	0 ~ 3FD7FF	File Register

Note: ddd: Decimal, hhh: Hexadecimal, ooo: Octal.

Every model of CPU is different, we suggest user to refer to MITSUBISHI MELSEC-Q manual's Device List.

## Wiring diagram:

Ethernet:

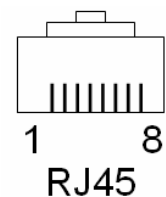
MT8000 Ethernet Wire color

RJ45

Ethernet Hub or

Switch RJ45

1	TX+	White/Orange	1	RX+
2	TX-	Orange	2	RX-
3	RX+	White/Green	3	TX+
4	BD4+	Blue	4	BD4+
5	BD4-	White/Blue	5	BD4-
6	RX-	Green	6	TX-
7	BD3+	White/Brown	7	BD3+
8	BD3-	Brown	8	BD3-



Ethernet: Direct connect (crossover cable)

MT8000 Ethernet Wire color

RJ45

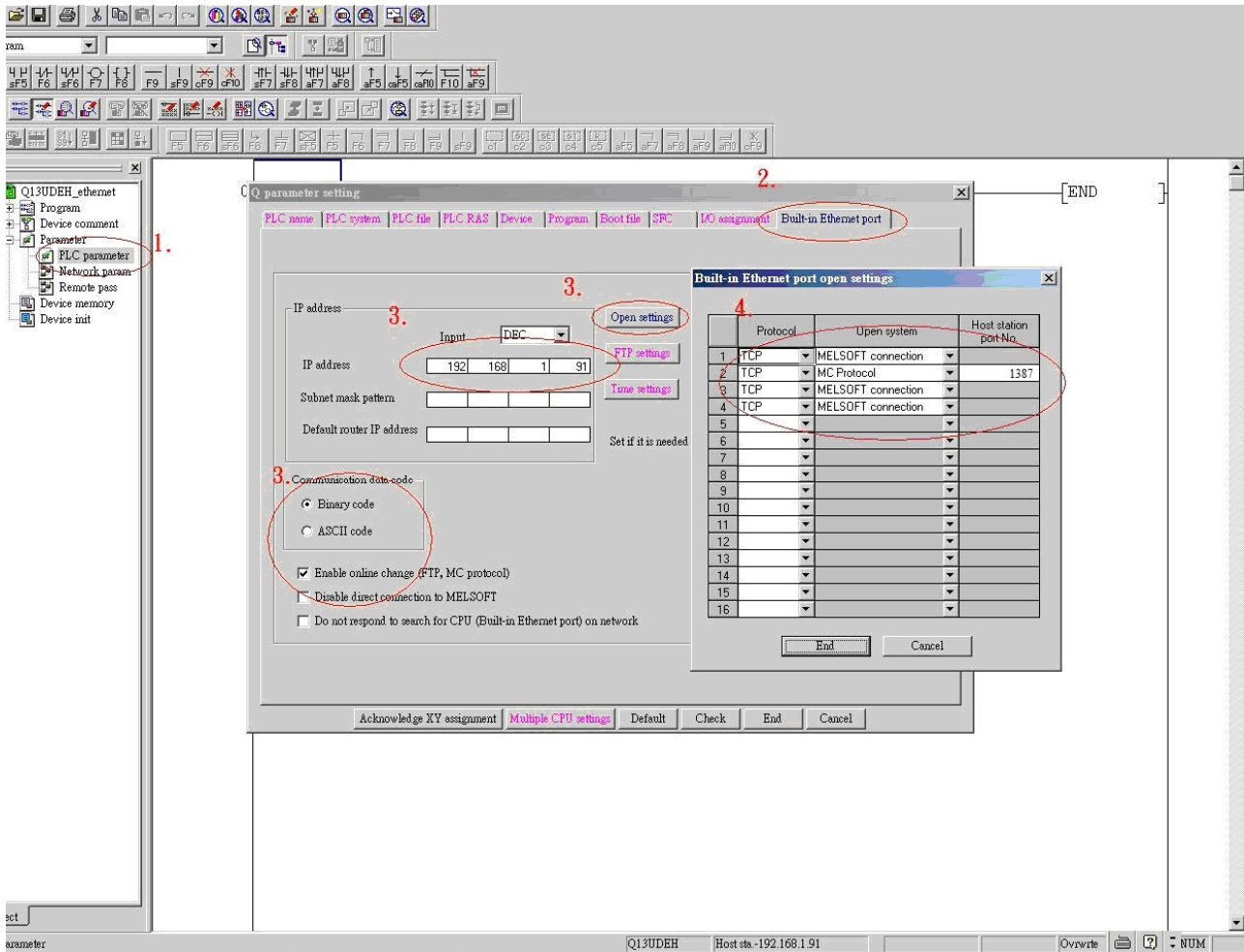
Modbus TCP Device

RJ45

1	TX+	White/Orange	3	RX+
2	TX-	Orange	6	RX-
3	RX+	White/Green	1	TX+

5	BD4-	White/Blue		5	BD4-
6	RX-	Green		2	TX-
7	BD3+	White/Brown		7	BD3+
8	BD3-	Brown		8	BD3-

## MITSUBISHI Q series Ethernet module setting:



1. Click PLC parameter
2. Built-in Ethernet port.
3. Click Open settings and then set the IP address and communication data code
4. Set the MC protocol-TCP Port No. (in Hex)