

Mitsubishi QJ71E71 (Ethernet)

Supported Series ; Mitsubishi Q type, MELSEC-Q series PLC (Q00J, Q00, Q01, Q02, Q02H, Q06H, Q12H, Q25H, Q12PH, Q25PH) QJ71E71-100 Ethernet module. Website: <u>http://www.mitsubishi-automation.com</u>

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Mitsubishi QJ71E71	(Ethernet)	
PLC I/F	Ethernet		
Port no.	5002		
PLC sta. no.	2	1~99	
Network	1	1~999	

PLC Setting:

QJ71E71-100 Ethernet module settings:

1. Use USB or RS232 of Q-CPU for setting PLC parameters.





Click [Operational settings] to set IP information. 2.

Network paramet	er X		
 ✓ (Unset project ♥ Program ♥ Device co ♥ Parameter ♥ PLC 1 ♥ Remc ♥ Remc ♥ Device m 	Netwo Starting Netwo Total Grou Stati	ork type g I/O No ork No stations up No. on No. ode	Module 1 Ethernet 0000 1 1 2 Online Volume 1
STEP 2			Operational settings Initial settings Open settings Router relay parameter Station No.<->IP information FTP Parameters E-mail settings Interrupt settings

	Module 1
Network type	Ethernet 🗸
Starting I/O No.	0000
Network No.	1
Total stations	
Group No.	1
Station No.	2
Mode	Online 📃 🗸 🗸
	Operational settings
	Initial settings
	Open settings
	Router relay parameter
	Station No.<->IP information
	FTP Parameters
	E-mail settings
	Interrupt settings



Select Ethernet (2.0) for communicating with HMI. 3.

Ethernet operations
Communication data code Binary code C ASCII code C ASCII code C Market of the state of the s
IP address Send frame setting
Input format DEC. SIEP 3 © Ethernet(V2.0)
IP address 192 168 10 105 C IEEE802.3
✓ Enable Write at RUN time TCP Existence confirmation setting
Use the KeepAlive
C Use the Ping
End

4. Click [Open settings] to set the system.

	Module 1
Network type	Ethernet 🗸
Starting I/O No.	0000
Network No.	1
Total stations	
Group No.	1
Station No.	2
Mode	Online 🗾 👻
	Operational settings
	Initial settings
STEP 4	Open settings
	Router relay parameter
	Station No.<->IP information
	FTP Parameters
	E-mail settings
	Interrupt settings



[TCP Port Settings] Open System: Unpassive

	Protocol		Open System		Fixed Buffer Fixed Buffer Communication		Pairing Open		Existence Confirmation	Host Station Port No.	Destination IP Address	Destination Port No.		
1	TCP 🔹	•	Unpassive	Ŧ	Send 🔹	4	Procedure Exist	•	Disable 🛛 👻	·	No Confirm 📼	5002		
2	TCP 🔹	-	Unpassive	Ŧ	Send •	4	Procedure Exist	•	Disable 👻	•	No Confirm 📼	5003		
3	TCP 🔹	·	Unpassive	•	Send •	•	Procedure Exist	•	Disable 👻	·	No Confirm 👻	5004		

[UDP Port Settings]

EasyBuilder Pro Version: 6.03.02.493 Build 2020.04.30

Version: 6.04.01.373 Build 2020.04.30 (excluding):

Only communication ports 5000 and 5001 can be used (no configuration required)

EasyBuilder Pro Version: 6.03.02.493 Build 2020.04.30

Version: 6.04.01.373 Build 2020.04.30 (inclusive) and later versions:

Support all UDP Port settings in the picture below

	Protoc	tol	Open System	Fixed Buffer	Fixed Buffer Communication	Pairing Open	Existence Confirmation	Host Station Port No.	Destination IP Address	Destination Port No.
1	UDP	-	-	Send 👻	Procedure Exist 🛛 👻	Disable 🛛 👻	No Confirm 👻	5002	192.168. 1.100	1234
2	UDP	-		Send 🗸	Procedure Exist 🛛 👻	Disable 🛛 👻	No Confirm 👻	5003	192.168. 1.100	65534
3	UDP	-	-	Send 🗸	Procedure Exist 🛛 👻	Disable 🛛 👻	No Confirm 📼	5004	192, 168, 1, 100	6000

Device type :	M	tsubishi Q771E71 (Ethen	met) >
	Device ID : 122, V.3.30, M	MITSUBISHI_QJ71E71.c3	30
I/F :	Ethernet	V Open De	write Connection Guide
* Support off-line s	mulation on HMI (use LB-12	2358).	IP Address Settings
19 : C	192. 168. 10. 105, Port=S Use UDP (User Datagen Device default station Default station no. use Use broadcast comman How to designate the static	003 am Protocol) 2 stable variable d	IP address : 192 , 158 , 10 , 105 Port no. : 5003 Remote Password Setting Enable
Inter	val of block pack (words) :	0 🗸	Times (sec): 1.0 V Turn around delay (ms): 0
Max. rei	ad-command size (words) :	28 🗸	Network or other (1x900) - 1
Max. wri	te-command size (words) :	64 V	
			The number of resending commands : 0 v
			OK Cancel

				PLC Connect	ion Guide
5. Press [END] t	o finish settings.				_
etting / Already Start I/O No. : Please input the start	set) Set if it is neede ting I/O No. of the module in	d(No setting / hEX(16 bit) form	Already set) Valid mo during ot	dule her station access STEP 5	
Routing parameters	Assignment image	Group Settings	Check	End	>
				,	-
Q02(H)	Ethernet-192.168.10.105		Ovrwrt	e C	

6. Restart PLC software and select [READ FROM PLC], select [QCPU(Qmode)] and press [OK].

Select PLC series	
PLC series OCPU(Qmode) STEP 6	OK Cancel

 In [PC side I/F Ethernet board setting] set Network No. and Station No. (Station No.1 is PC Station No. not Ethernet module Station No., ranged from 2~64, the Network No. can not be the same as that of PC)

PC side I/F Ethernet board setting	
Network No. 1	OK
Station No. 1	Cancel
This is the layout setting layout for the Ethernet board. P. following setting.	lease execute the
Network No: Network No. of Ethernet unit set in parame Station No.: Station No. that does not overlap on the sam	eter. 1e loop.
Protocol TCP 💌	



 Select "Ethernet module" in PLC Side I/F to set QJ71E71 IP address.(IP address = Network Parameter IP address)

PLC side I/F detailed settin	g of Ethernet module	X
PLC Network No. Station No. IP address Host Name	QJ71E71 1 1 STEP 8 192 168 10 105 IP input format	OK Cancel DEC. 💌
Kouung parameter transfer met	nod Automatic response system	_

9. For "Other station", click [Other station(Single network)"] for setting [Check at communication time] and [Retry times].

Other station Detailed s	etting	X
Check at communication time Retry times It is not possible to cancel	30 sec. STEP 9 0 times step 9 while communication retrying.	OK Cancel

10. After finishing the settings above, click [Connection test] for testing the communication and sending the PLC program.

Device Address:

Bit/Word	Device type	Format	Range	Memo
В	SM	N.DDDD	0 ~ 4.2047	
В	Х	N.HHHH	0 ~ 4.1fff	Input Relay
В	Υ	N.HHHH	0 ~ 4.1fff	Output Relay
В	М	N.DDDDD	0 ~ 4.61439	Internal Relay
В	L	N.DDDDD	0 ~ 4.32767	Latch Relay
В	F	N.DDDDD	0 ~ 4.32767	Annunciator
В	V	N.DDDDD	0 ~ 4.32767	Edge Relay
В	В	N.HHHH	0 ~ 4.1fff	Link Relay
В	TS	N.DDDD	0 ~ 4.2047	Timer Contact

VEINTEK PLC Connection Guide						
Bit/Word	Device type	Format	Range	Memo		
В	TC	N.DDDD	0 ~ 4.2047	Timer Coil		
В	SS	N.DDDDD	0 ~ 4.25471	Retentive Timer		
В	SC	N.DDDDD	0 ~ 4.25471	Retentive Timer Coil		
В	CS	N.DDDDD	0 ~ 4.25471	Counter Contact		
В	CC	N.DDDDD	0 ~ 4.25471	Counter Coil		
В	SB	N.HHH	0 ~ 4.7ff	Special Link Relay		
В	S	N.DDDD	0 ~ 4.8191	Step Relay		
В	DX	N.HHHH	0 ~ 4.1fff	Direct Input		
В	DY	N.HHHH	0 ~ 4.1fff	Direct Output		
В	D_Bit	N.DDDDDDDh	0 ~ 4.4212735f			
В	ZR_Bit	N.HHHHHh	0 ~ 4.fe7fff			
В	ZR_Dec_Bit	N.DDDDDDDh	0 ~ 4.1042431f			
W	SD	N.DDDD	0 ~ 4.2047			
W	D	N.DDDDDDD	0 ~ 4.4212735	Data Register		
W	W	N.HHHH	0 ~ 4.1fff	Link Register		
W	TN	N.DDDD	0 ~ 4.2047	Timer Current Value		
W	SN	N.DDDD	0 ~ 4.2047	Retentive Timer Current		
W	CN	N.DDDD	0 ~ 4.1023	Counter Current		
W	SW	N.HHH	0 ~ 4.7ff	Special Link Register		
W	Z	N.DD	0 ~ 4.15	Index Register		
w	R	N.FFFDDDDD	0 ~ 4.3132767	File Register (FF:File No.		
				0~31) (DDDDD:0~32767)		
W	ZR	N.HHHHH	0 ~ 4.fe7ff	File Register		
W	ZR_decimal_addr	N.DDDDDDD	0 ~ 4.1042341			

Note: N=CPU Slot no. (0~4)

Wiring Diagram:

Ethernet cable:

