Mitsubishi Q Series Ethernet (3E Frame)

HMI Factory Setting:

Controller IP Address: 192.168.0.1

Controller Ethernet Port: 1025

Controller Station Number: 0

Control Area / Status Area: D-0 / D-10

Applicable models: DOP-B / DOP-W / DOP-H / HMC series、DOP-100

Connection

Standard jumper Cable/ Network Cable without jumper (Auto-detected by HMI)

Definition of PLC Read/Write Address

a. Registers

Type	Format	Read/Write Range	Data Length	Note
	Word No. (n)			
Input	**X**-n	**X**-0 – **X**-1FFF	Word	Hexadecimal, 2
Output	**Y**-n	**Y**-0 – **Y**-1FFF	Word	Hexadecimal, 2
Direct Input	**DX**-n	**DX**-0 – **DX**-1FFF	Word	Hexadecimal,2
Direct Output	**DY**-n	**DY**-0 – **DY**-1FFFF	Word	Hexadecimal,2
Latch Relay	**L**-n	**L**-0 – **L**-32767	Word	2
Annunciator	**F**-n	**F**-0 – **F**-32767	Word	2
Edge Relay	**V**-n	**V**-0 – **V**-32767	Word	2
Step Relay	**S**-n	**S**-0 – **S**-8191	Word	2
Link Relay	**B**-n	**B**-0 – **B**-7FFF	Word	Hexadecimal,2
Special Link Relay	**SB**-n	**SB**-0 – **SB**-7FF	Word	Hexadecimal,2
Internal Relay	**M**-n	**M**-0 – **M**-32767	Word	2
Special Internal Relay	**SM**-n	**SM**-0 – **SM**-2047	Word	2
Timer Value	**TN**-n	**TN**-0 – **TN**-23087	Word	2
Retentive Timer Value	**SN**-n	**SN**-0 – **SN**-23087	Word	
Counter Value	**CN**-n	**CN**-0 – **CN**-23087	Word	
Data Register	**D**-n	**D**-0 – **D**-4212735	Word	
Special Data Register	**SD**-n	**SD**-0 – **SD**-2047	Word	
Index Register	**Z**-n	**Z**-0 – **Z**-19	Word	
File Register	**R**-n	**R**-0 – **R**-32767	Word	

Type	Format	Read/Write Range	Data Length	Note
	Word No. (n)			
File Register	**ZR**-n	**ZR**-0 –**ZR**-9999999	Word	3
		ZR-0 –**ZR**-98967F	Word	Hexadecimal, 3
Link Register	**W**-n	**W**-0 – **W**-657F	Word	Hexadecimal
Special Link Register	**SW**-n	**SW**-0 – **SW**-7FF	Word	Hexadecimal

b. Contacts

Type	Format	Read/Write Range	Note
	Bit No. (b)		
Input	**X**b	**X**-0 – **X**-1FFF	Hexadecimal
Output	**Y**b	**Y**-0 – **Y**-1FFF	Hexadecimal
Direct Input	**DX**-b	**DX**-0 – **DX**-1FFF	Hexadecimal
Direct Output	**DY**-b	**DY**-0 – **DY**-1FFF	Hexadecimal
Latch Relay	**L**-b	**L**-0 – **L**-32767	
Annunciator	**F**-b	**F**-0 – **F**-32767	
Edge Relay	**V**-b	**V**-0 – **V**-32767	
Step Relay	**S**-b	**S**-0 – **S**-8191	
Link Relay	**B**-b	**B**-0 – **B**-7FFF	Hexadecimal
Special Link Relay	**SB**-b	**SB**-0 – **SB**-7FF	Hexadecimal
Internal Relay	**M**-b	**M**-0 – **M**-32767	
Special Internal Relay	**SM**-b	**SM**-0 – **SM**-2047	
Timer Contact	**TS**-b	**TS**-0 – **TS**-23087	
Timer Coil	**TC**-b	**TC**-0 – **TC**-23087	
Retentive Timer Contact	**SS**-b	**SS**-0 – **SS**-23087	
Retentive Timer Coil	**SC**-b	**SC**-0 – **SC**-23087	
Counter Contact	**CS**-b	**CS**-0 – **CS**-23087	
Counter Coil	**CC**-b	**CC**-0 – **CC**-23087	
Data Register	**D**-n.b	**D**-0.0 – **D**-4212735.15	
File Register	**R**-n.b	**R**-0.0 – **R**-32767.15	
File Register	**ZR**-n.b	**ZR**-0.0 – **ZR**-9999999.15	3
		ZR-0.0 – **ZR**-98967F.F	Hexadecimal, 3
Link Register	**W**-n.b	**W**-0.0 – **W**-4047FF.F	Hexadecimal

1) Before using this communication protocol, the user needs to set communication module via GX Developer programming tools. For more detailed information regarding the setting method, please refers to Mitsubishi PLC User Manual.

2) The device address must be the multiple of 16.

3) This controller supports both hexadecimal /decimal format for File Register **ZR**, it can be done through set extra parameter in "DOPSoft → Communication Setting → Mitsubishi FX3U Ethernet Controller → ZF address format", default value is hexadecimal.