

Mitsubishi – Q Series devices

The MitsubishiQ driver implements communication with Mitsubishi Series Q devices on TCP/IP networks. The communications blocks are dynamically created according to the pooling cycle defined on the AccessType for each Device Point.

Summary Information

Communication Driver Name: MitsubishiQ

Current Version: 1.0.0.0

Implementation DLL: T.ProtocolDriver. MitsubishiQ.dll

Protocol: MELSEC

Interface: TCP/IP

PLC types supported: Mitsubishi Series Q devices

Multi-threading: User configurable

Max number of nodes: User defined

PC Hardware requirements: Standard PC Ethernet interface board

Channel Configuration

Protocol Options

BlockSize: Defines the maximum amount of items per group. The default value is 255

Format: Defines the MELSEC protocol format. Default value is 3E

Node Configuration

Station Configuration

Station syntax: <IP address>;<Port number>

Where:

- **<IP address>** = The IP address of the Mitsubishi device in the network
- **<Port number>** = The TCP port where the Mitsubishi device is listening (default is 5001)

E.g.: 192.168.1.101; 5001

Point Configuration

The syntax for the MitsubishiQ communication points is: <Operand><Address>

Where:

- **<Operand>** indicates the memory area in the Mitsubishi device:

Operand	Description
X	Input
Y	Output

M	Internal relay
L	Latch relay
B	Link relay
F	Annunciator
V	Edge relay
SM	Special relay
TS	Timer (contact)
TC	Timer (coil)
CS	Counter (contact)
CC	Counter (coil)
TN	Timer (present value)
CN	Counter (present value)
D	Data register
R	File register
SD	Special register

- **<Address>** indicates that address that communicates.

E.g.: D500, Y05

Troubleshoot

The status of the driver's execution can be observed through the diagnostic tools, which are:

- Trace window
- Property Watch
- Module Information

The above tools indicate if the operations have succeeded or have failed. A status of 0 (zero) means communication is successful. Negative values indicate internal driver errors, and positive values indicate protocol error codes.

MitsubishiQ error codes:

Error	Name	Causes	Solutions
-203	INVALID COMMAND	Device returns error in the last command	Use the Trace window tools to save the log and send it to support