Omron FINS Master Connector

CS/CJ/CP-series CPU Unit or NSJ Controller

- Name: **OmronFINS**
- Version: 1.0.0.0
- Protocol: FINS
- Interface: UDP and Serial
- Runtime: Multiplatform
- Configuration:
    - Devices / Protocols

Channel Configuration
Node Configuration
Point Configuration

Overview

Omron Master – using FINS Commands – UDP and RS232.

OmronFINS implements communication with CS/CJ/CP-series CPU Unit or NSJ devices that are compatible with FINS. It operates as a Master on UDP or serial networks. The communication blocks are dynamically created according to the pooling cycle defined on the AccessType for each Device Point.

Supported Devices: CS/CJ/CP-series CPU Unit or NSJ Controller

Tested Equipment: SYSMAC CJ2M CPU34 and CPU35 using UDP/FINS

Supported Operands

Supported Operands				
Operand	**Read**	**Write**	**Data Type**	**Address size**
CIO – CIO	**Yes**	**Yes**	Word	2 bytes
WR – Work	**Yes**	**Yes**	Word	1 bit
HR – Holding Bit	**Yes**	**Yes**	Word	2 bytes
AR - Auxiliary Bit	**Yes**	**Yes**	Word	2 bytes
DM – Data Memory	**Yes**	**Yes**	Word	2 bytes
TA – Timers	**Yes**	**Yes**	BCD	2 bytes
CA – Counters	**Yes**	**Yes**	BCD	2 bytes
EM# – Extended Memory	**Yes**	**Yes**	Word	2 bytes

Channel Configuration

Protocol Options

Mode: Determines the compatible equipment:

- CS1: CS/CJ series compatible
- CV: CV/CVM1 series compatible

Network: Represents the FINS network. This information is related to the Master

Node: Represents the computer Node in the FINS network. If the number 0 is specified, the driver assumes the last octet of the IP Address as the Node number (for UDP Interface)

Ignore Non Fatal Error: Indicates the driver's behavior when the PLC returns a non fatal error status of 64:

- **True**: If it returns a Success with the 64 error code, set the tag quality to GOOD
- **False**: If it returns a Failed with the 64 error code, set the tag quality to BAD

Node Configuration

PrimaryStation Configuration

Serial channels

Station syntax: <**Network**>;<**Node**>;<**UnitID**>

Where:

- <**Network**> = Represents the FINS network where the device is located
- <**Node**> = Represents the device Node number in the FINS network
- <**UnitID**> = Represents the Device ID in the FINS network

E.g.: 0;1;0

UDP channels

Station syntax:<**IP**>;<**Port**>;<**Network**>;<**Node**>

Where :

- <**IP**> = The IP address of the device in the network
- <**Port**> = The UDP port where the device is listening (default is 9600)
- <**Network**> = Represents the FINS network where the device is located
- <**Node**> = Represents the Device Node number in the FINS network

E.g.: 192.168.1.101;9600;1;0

> ⚠ Note: When using multiple nodes, the UDP port must be different for each Node.

Point Configuration

The syntax for the OmronFINS communication points is: **<Memory Area>:<Address>**

For more information about the valid operands, see Supported Operands.

E.g.:

- CA:0 Memory Area = CA, Address = 0
- CIO:20 Memory Area = CIO, Address = 20
- EM0:1 Memory Area = Extended Memory 0, Address = 1
- EM6:1 Memory Area = Extended Memory 6, Address = 1

Note: The *E* and *EM* memory areas support "Bank" selection, which can be left empty or specified as values ranging from 0 to 7. Other memory areas doesn't support Bank setting.

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