AB Rockwell MicroLogix Connector

Rockwell MicroLogix 1100 and 1400 devices

- Name: **MicroLogix**
- Version 1.3.0.1
- Protocol: CIP
- Interface: TCP/IP
- Runtime: .NET 2.0 (Multiplatform)
- Configuration:
    - Devices / Protocols

Channel Configuration
Node Configuration
Points Configuration
Driver Revision History

Module Configuration

This document has only information about the device connection settings and its address syntax.

For further Information, see:

- Devices Module
- Devices Module Reference

Channel Configuration

No custom settings are required.

On TCP/IP settings, you can optimize communication using the field:

NodeConnections: Defines the maximum number of parallel requests that will be sent to each node (asynchronous communication)

Node Configuration

Primary Station

Stations syntax: <IP > ; <Port >

Where :

<**IP**> = IP address of the slave device in the network

< **Port** > = TCP port where the slave device is listening (default is 44818)

Example: 192.168.1.101; 44818

Points Configuration

Supported Operands

MicroLogix Driver Supported Operands				
Operand	**Read**	**Write**	**Data Type**	**Address size**
N – Integer	**Yes**	**Yes**	Short	2 bytes
F – Float	**Yes**	**Yes**	Single	4 bytes
B – Binary	**Yes**	**Yes**	Short	2 bytes
O – Output	**Yes**	**Yes**	Short	2 bytes
I – Input	**Yes**	**-**	Short	2 bytes
S – Status	**Yes**	**Yes**	Short	2 bytes

ST – String	**Yes**	**Yes**	ASCII	Max 82 bytes
DLG-DataLogging	**Yes**	**-**	ASCII	Max 109

Point Address Syntax

The syntax for the ControlLogix communication points is: <File Type><File Number> : <Address>

- **File Type:** identifies the Operand.
- **File Number**: number reference for the File Type
- **Address**: address number in the PLC.

The valid values for **File Type** are:

ControlLogix Driver File Types	
File Type	**Operand**
N	Integer
F	Float
B	Binary
O	Output
I	Input
S	Status
ST	String
DLG	DataLogging

Examples

MicroLogix Address Configurations Examples	
Address	**Description**
F8:1	File Type = F, File Number = 8, Address = 1
F8:2	File Type = F, File Number = 8, Address = 2
N7:1	File Type = N, File Number = 7, Address = 1
B3:10	File Type = B, File Number = 3, Address = 10
ST11:1	File Type = ST, File Number = 11, Address = 1
DLG0:34	ile Type = DLG, Queue Number = 0, Number of Bytes = 34

Bit addressing is done via the **Modifiers Bit** field in FrameworX, not as part of the address string. The address format is `<FileType><FileNumber>: <Address>` (e.g., `B3:0`), and bit position is specified separately in the tag configuration Modifiers.

Consider the table below to calculate the Number of Bytes for the DataLogging

Number of Bytes for the DataLogging	
Data	**Formatted String Size**
delimiter	1 character
word	6 characters
long word	11 characters

date	10 characters
time	8 characters
string	89 characters
float	13 characters

Driver Revision History

MicroLogix Driver Revision History	
Version	**Notes**
1.2	Initial release on new documentation standards

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