

Yokogawa YS100 Serial Driver Help

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Yokogawa YS100 Serial Driver Help

Help version 1.014

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Overview

The Yokogawa YS100 Serial Driver provides an easy and reliable way to connect Yokogawa YS100 Serial devices to OPC Client applications, including HMI, SCADA, Historian, MES, ERP and countless custom applications. It is intended for use with the Yokogawa YS100 family of serial devices.

Device Setup

Supported Devices

YS150
YS170

Communication Protocol

YS100 Command-Response Message Format

Supported Communication Parameters

Baud Rate: 1200, 2400, 4800, and 9600.
Parity: Odd, Even, and None.
Data Bits: 8
Stop Bits: 1 and 2.

Note: When using the RS-232 dedicated port with a RJ45 connected to the front of the unit (located beneath the swing out cover), the communication parameters will be fixed at 4800 Baud, No Parity, 8 Data Bits, and 1 Stop Bit.

Ethernet Encapsulation

This driver supports Ethernet Encapsulation, which allows the driver to communicate with serial devices attached to an Ethernet network with a terminal server. It may be enabled through the Communications dialog in Channel Properties. For more information, refer to the server's help file.

Device ID (PLC Network Address)

Yokogawa YS100 Serial devices are assigned Device IDs in the range 1 to 16. When communicating with a device in Peer-to-Peer Mode, use the RS-232 dedicated port with a RJ45 connected to the front of the unit. The fixed address is 0.

Flow Control

When using a RS232/RS485 converter, the type of flow control that is required will depend on the converter's needs. Some do not require flow control, whereas others require RTS Flow. Consult the converter's documentation in order to determine its flow requirements. An RS485 converter that provides automatic flow control is recommended.

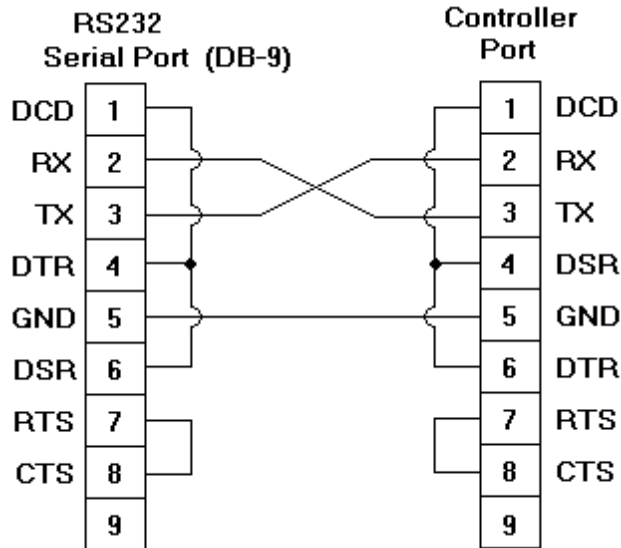
Note 1: When using the manufacturer's supplied communications cable, it is sometimes necessary to choose a flow control setting of **RTS** or **RTS Always** under the Channel Properties.

Note 2: The Yokogawa YS100 Serial Driver supports the RTS Manual flow control option. This selection is used to configure the driver for operation with radio modems that require special RTS timing characteristics. For more information on RTS Manual flow control, refer to the server help file.

See Also: [Settings](#)

Cable Connections

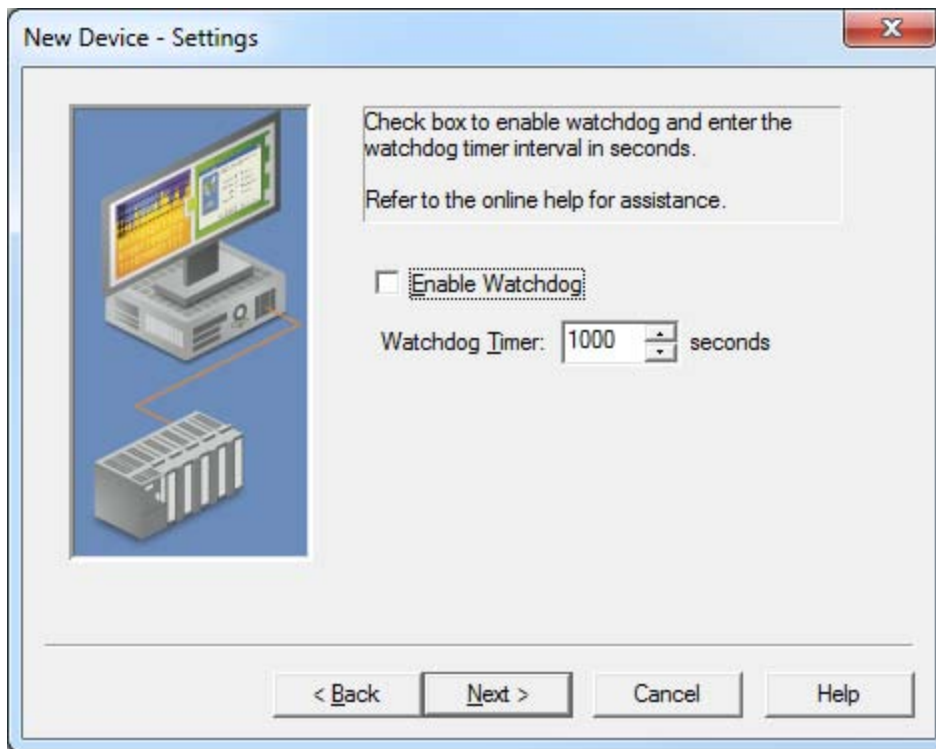
The diagram below displays a typical cable connection. For information on connection options, refer to the documentation that came with the device.



Modem Setup

This driver supports modem functionality. For more information, please refer to the topic "Modem Support" in the OPC Server Help documentation.

Settings



Descriptions of the parameters are as follows:

- **Enable Watchdog:** When checked, the watchdog command will be sent based on the interval specified in Watchdog Timer. The default setting is unchecked.

Note: Devices operating in DDC or SPC mode may require that the supervisory computer sends a watchdog command to the device at fixed intervals. If the watchdog command is not received by the device from

the supervisory computer within the defined interval, the device will run in backup mode.

- **Watchdog Timer:** This parameter specifies the interval on which the watchdog command will be sent to the device. It is only available when the watchdog is enabled. The valid range is 0 to 9999 seconds. The default setting is 1000 seconds.

Note: If this parameter is set to 0 seconds while the watchdog is enabled, the Yokogawa YS100 Serial Driver will send a watchdog command to the device that disables the supervisory computer watchdog function in the device.

Data Types Description

| Data Type | Description |
|-----------|--|
| Boolean | Single bit |
| Byte | 8 bit value bit 1 is the low bit bit 8 is the high bit |
| Word | Unsigned 16 bit value |
| Short | Signed 16 bit value |
| Float | 32 bit floating point value. |
| String | Zero terminated character array |

Address Descriptions

The Yokogawa YS100 Serial Driver automatically generates tags for many important device parameters. Users can also manually create tags. Address specifications vary depending on the model in use. Select a link from the list below to obtain specific address information for the model of interest.

[YS150](#)

[YS170](#)

YS150 Addressing

The table below describes how to specify an address when creating a tag. The default data types for dynamically defined tags are shown in **bold**.

Note: The full range of addresses accepted by this driver may not be valid for a particular device.

| Address | Range | Data Type | Access | Description |
|------------|-------|--------------------------|------------|--|
| PV | 1-2 | Float | Read Only | Process variable |
| SV | 1-2 | Float | Read/Write | Setpoint value |
| CSV | 1-2 | Float | Read Only | Cascade setpoint value |
| DV | 1-2 | Float | Read Only | Deviation Value |
| MV | 1-2 | Float | Read/Write | Manipulated variable |
| LS | 1-2 | String | Read/Write | Action mode |
| SCH | 1-2 | Float | Read Only | Range high limit 1 |
| SCL | 1-2 | Float | Read Only | Range low limit 1 |
| SCDP | 1-2 | Short, Word, Byte | Read Only | Decimal point position 1 |
| PH | 1-2 | Float | Read/Write | Setpoint for high limit alarm 1 |
| PL | 1-2 | Float | Read/Write | Setpoint for low limit alarm 1 |
| DL | 1-2 | Float | Read/Write | Setpoint for deviation limit alarm 1 |
| VL | 1-2 | Float | Read/Write | Setpoint for velocity limit alarm 1 |
| VT | 1-2 | Short, Word, Byte | Read/Write | Time duration setpoint for velocity limit alarm 1 |
| MH | 1-2 | Float | Read/Write | Setpoint for manipulated variable high limit 1 |
| ML | 1-2 | Float | Read/Write | Setpoint for manipulated variable low limit 1 |
| RefreshALM | 1-2 | Boolean | Write Only | Refreshes the alarm setpoint values (PH, PL, DL, VL, VT, MH, and ML) |
| PB | 1-2 | Float | Read/Write | Proportional band 2 |
| TI | 1-2 | Short, Word, Byte | Read/Write | Integral time (seconds) 2 |
| TD | 1-2 | Short, Word, Byte | Read/Write | Derivative time (seconds) 2 |
| AG | 1-2 | Float | Read Only | Variable gain 2 |
| GG | 1-2 | Float | Read/Write | Nonlinear control gain 2 |
| GW | 1-2 | Float | Read/Write | Nonlinear control dead band width 2 |
| MR | 1-2 | Float | Read/Write | Manual reset value 2 |
| RB | 1-2 | Float | Read/Write | Reset bias value 2 |
| DM | 1-2 | Float | Read Only | Input compensation value 2 |
| FF | 1-2 | Float | Read Only | Output compensation value 2 |
| TRK | 1-2 | Float | Read Only | Tracking output value 2 |
| PMV | 1-2 | Float | Read/Write | Preset output value 2 |
| PRCA | None | Byte, Short, Word | Read Only | Process alarm |
| PRCA.1 | None | Boolean | Read Only | High limit alarm 1 |
| PRCA.2 | None | Boolean | Read Only | Low limit alarm 1 |
| PRCA.3 | None | Boolean | Read Only | Deviation alarm 1 |
| PRCA.4 | None | Boolean | Read Only | Velocity alarm 1 |
| PRCA.5 | None | Boolean | Read Only | High limit alarm 2 |
| PRCA.6 | None | Boolean | Read Only | Low limit alarm 2 |
| PRCA.7 | None | Boolean | Read Only | Deviation alarm 2 |
| PRCA.8 | None | Boolean | Read Only | Velocity alarm 2 |
| SYSA | None | Byte, Short, Word | Read Only | System alarm |
| SYSA.1 | None | Boolean | Read Only | Input open alarm |

| | | | | |
|------------|------|--------------------------|------------|---|
| SYSA.2 | None | Boolean | Read Only | Output current open alarm |
| SYSA.3 | None | Boolean | Read Only | Invalid data |
| SYSA.4 | None | Boolean | Read Only | Invalid data |
| SYSA.5 | None | Boolean | Read Only | Computed overflow alarm |
| SYSA.6 | None | Boolean | Read Only | RAM contents volatized alarm |
| SYSA.7 | None | Boolean | Read Only | EEPROM contents volatized alarm |
| SYSA.8 | None | Boolean | Read Only | Invalid data |
| CNT<x>.1 | 1-2 | Short, Word, Byte | Read Only | Control type setting 1 (0=Standard PID, 1=Sample PI, 2=Batch PID, 3=Proportional PD) |
| CNT<x>.2 | 1-2 | Short, Word, Byte | Read Only | Control computation setting 1 (0=PV proportional type, 1=PV derivative type, 2=Adjustable filter type) |
| CNT<x>.3 | 1-2 | Short, Word, Byte | Read Only | Control action direction setting 1 (0=Reverse, 1=Direct) |
| CNT<x>.4 | 1-2 | Short, Word, Byte | Read Only | Open valve direction setting 1 (0=C-O, 1=O-C) |
| CNT<x>.5 | 1-2 | Short, Word, Byte | Read Only | C mode setting 1 (0=Off, 1=Cascade, 2=Computer) |
| CNT<x>.6 | 1-2 | Short, Word, Byte | Read Only | Backup mode setting 1 (0=Manual, 1=Auto) |
| CNT<x>.7 | 1-2 | String | Read Only | Engineering unit 1 |
| CNT<x>.8 | 1-2 | String | Read Only | Tag number 1 |
| RefreshCNT | 1-2 | Boolean | Write Only | Refreshes the CNT1 or CNT2 setting values |
| SYS1.1 | None | Short, Word, Byte | Read Only | Control mode 1 (0=Programmable, 1=Multifunction type single-loop, 2=Multifunction type cascade, 3=Multifunction type selector) |
| SYS1.2 | None | Short, Word, Byte | Read Only | Recovery from power failure 1 (0=TIM1, 1=AUT, 2=TIM2) |
| SYS1.3 | None | Short, Word, Byte | Read Only | Settable by comm. 1 (0=Enabled, 1=Inhibited) |
| SYS2.1 | None | Short, Word, Byte | Read Only | PF key definition 1 (0=None, 2=STC ON/OFF) |
| SYS2.2 | None | Short, Word, Byte | Read Only | DI1 function definition 1 (0=None, 1=A/M Toggle, 2=C/A Toggle, 3=Preset MV, 4=Tracking Toggle, 5=STC Toggle, 6=Internal CAS Toggle, 7=Selector Secondary Loop C/A Toggle) |
| SYS2.3 | None | Short, Word, Byte | Read Only | DI1 set active 1 (0=Open for ON, 1=Closed for ON) |
| SYS2.4 | None | Short, Word, Byte | Read Only | Alarm output status 1 (0=Open, 1=Closed) |
| SYS2.5 | None | Short, Word, Byte | Read Only | SV tracking definition 1 (0=None, 1=SV, 2=PV) |

| | | | | |
|------------|-------|---------------------------|------------|---|
| SYS2.6 | None | Short , Word, Byte | Read Only | Selector definition 1 (0=Low selector, 1=High Selector) |
| RefreshSYS | None | Boolean | Write Only | Refreshes the SYS1 and SYS2 setting values |
| Model | None | String | Read Only | Model name 1 |
| X* | 01-05 | Float | Read Only | Analog input register |
| Y** | 01-06 | Float | Read Only | Analog output register |
| DI | 01-06 | Boolean | Read Only | Status input register |
| DO | 01-16 | Boolean | Read Only | Status output register |
| P | 01-30 | Float | Read/Write | Computation parameter register 3 |
| T | 01-30 | Float | Read Only | Temporary storage register 3 |
| K | 01-30 | Float | Read Only | Constant register 3 |

*The memory address X05 is only valid in Program Mode.

**The memory addresses Y04-Y06 are only valid in Program Mode.

Notes

1 Static Data

The data is read once at start up in order to initialize the value. To refresh the data, use the applicable Refresh Tag for all static data (with the exception of 'Model').

2 Tuning Parameters

To increase the speed of optimization, only reference the address for this data when needed. When tuning data is included in the application, it must be scanned between reads of the loop variable data.

3 Computation Temporary and Constant Registers

Although register data is not generated during automatic tag generation, it can be added if needed. When register data is included in the application, it must be scanned between reads of the loop variable data.

YS170 Addressing

The table below describes how to specify an address when creating a tag. The default data types for dynamically defined tags are shown in **bold**.

Note: The full range of addresses accepted by this driver may not be valid for a particular device.

| Address | Range | Data Type | Access | Description |
|------------|-------|---------------------------|------------|--|
| PV | 1-2 | Float | Read Only | Process variable |
| SV | 1-2 | Float | Read/Write | Setpoint value |
| CSV | 1-2 | Float | Read Only | Cascade setpoint value |
| DV | 1-2 | Float | Read Only | Deviation Value |
| MV | 1-2 | Float | Read/Write | Manipulated variable |
| LS | 1-2 | String | Read/Write | Action mode |
| SCH | 1-2 | Float | Read Only | Range high limit 1 |
| SCL | 1-2 | Float | Read Only | Range low limit 1 |
| SCDP | 1-2 | Short , Word, Byte | Read Only | Decimal point position 1 |
| PH | 1-2 | Float | Read/Write | Setpoint for high limit alarm 1 |
| PL | 1-2 | Float | Read/Write | Setpoint for low limit alarm 1 |
| DL | 1-2 | Float | Read/Write | Setpoint for deviation limit alarm 1 |
| VL | 1-2 | Float | Read/Write | Setpoint for velocity limit alarm 1 |
| VT | 1-2 | Short , Word, Byte | Read/Write | Time duration setpoint for velocity limit alarm 1 |
| MH | 1-2 | Float | Read/Write | Setpoint for manipulated variable high limit 1 |
| ML | 1-2 | Float | Read/Write | Setpoint for manipulated variable low limit 1 |
| RefreshALM | 1-2 | Boolean | Write Only | Refreshes the alarm setpoint values (PH, PL, DL, VL, VT, MH, and ML) |
| PB | 1-2 | Float | Read/Write | Proportional band 2 |
| TI | 1-2 | Short , Word, Byte | Read/Write | Integral time (seconds) 2 |
| TD | 1-2 | Short , Word, Byte | Read/Write | Derivative time (seconds) 2 |
| AG | 1-2 | Float | Read Only | Variable gain 2 |
| GG | 1-2 | Float | Read/Write | Nonlinear control gain 2 |
| GW | 1-2 | Float | Read/Write | Nonlinear control dead band width 2 |

| | | | | |
|------------|------|--------------------------|------------|--|
| MR | 1-2 | Float | Read/Write | Manual reset value 2 |
| RB | 1-2 | Float | Read/Write | Reset bias value 2 |
| DM | 1-2 | Float | Read Only | Input compensation value 2 |
| FF | 1-2 | Float | Read Only | Output compensation value 2 |
| TRK | 1-2 | Float | Read Only | Tracking output value 2 |
| PMV | 1-2 | Float | Read/Write | Preset output value 2 |
| PRCA | None | Byte, Short, Word | Read Only | Process alarm |
| PRCA.1 | None | Boolean | Read Only | High limit alarm 1 |
| PRCA.2 | None | Boolean | Read Only | Low limit alarm 1 |
| PRCA.3 | None | Boolean | Read Only | Deviation alarm 1 |
| PRCA.4 | None | Boolean | Read Only | Velocity alarm 1 |
| PRCA.5 | None | Boolean | Read Only | High limit alarm 2 |
| PRCA.6 | None | Boolean | Read Only | Low limit alarm 2 |
| PRCA.7 | None | Boolean | Read Only | Deviation alarm 2 |
| PRCA.8 | None | Boolean | Read Only | Velocity alarm 2 |
| SYSA | None | Byte, Short, Word | Read Only | System alarm |
| SYSA.1 | None | Boolean | Read Only | Input open alarm |
| SYSA.2 | None | Boolean | Read Only | Output current open alarm |
| SYSA.3 | None | Boolean | Read Only | Invalid data |
| SYSA.4 | None | Boolean | Read Only | Invalid data |
| SYSA.5 | None | Boolean | Read Only | Computed overflow alarm |
| SYSA.6 | None | Boolean | Read Only | RAM contents volatized alarm |
| SYSA.7 | None | Boolean | Read Only | EEPROM contents volatized alarm |
| SYSA.8 | None | Boolean | Read Only | Invalid data |
| CNT<x>.1 | 1-2 | Short, Word, Byte | Read Only | Control type setting 1 (0=Standard PID, 1=Sample PI, 2=Batch PID, 3=Proportional PD) |
| CNT<x>.2 | 1-2 | Short, Word, Byte | Read Only | Control computation setting 1 (0=PV proportional type, 1=PV derivative type, 2=Adjustable filter type) |
| CNT<x>.3 | 1-2 | Short, Word, Byte | Read Only | Control action direction setting 1 (0=Reverse, 1=Direct) |
| CNT<x>.4 | 1-2 | Short, Word, Byte | Read Only | Open valve direction setting 1 (0=C-O, 1=O-C) |
| CNT<x>.5 | 1-2 | Short, Word, Byte | Read Only | C mode setting 1 (0=Off, 1=Cascade, 2=Computer) |
| CNT<x>.6 | 1-2 | Short, Word, Byte | Read Only | Backup mode setting 1 (0=Manual, 1=Auto) |
| CNT<x>.7 | 1-2 | String | Read Only | Engineering unit 1 |
| CNT<x>.8 | 1-2 | String | Read Only | Tag number 1 |
| RefreshCNT | 1-2 | Boolean | Write Only | Refreshes the CNT1 or CNT2 setting values |
| SYS1.1 | None | Short, Word, Byte | Read Only | Control mode 1 (0=Programmable, 1=Multifunction type single-loop, 2=Multifunction type cascade, 3=Multifunction type selector) |
| SYS1.2 | None | Short, Word, Byte | Read Only | Recovery from power failure 1 (0=TIM1, 1=AUT, 2=TIM2) |
| SYS1.3 | None | Short, Word, Byte | Read Only | Settable by comm. 1 (0=Enabled, 1=Inhibited) |
| SYS2.1 | None | Short, Word, Byte | Read Only | PF key definition 1 |

| | | | | |
|------------|-------|---------------------------|------------|---|
| | | | | (0=None, 2=STC ON/OFF) |
| SYS2.2 | None | Short , Word, Byte | Read Only | DI1 function definition 1 (0=None, 1=A/M Toggle, 2=C/A Toggle, 3=Preset MV, 4=Tracking Toggle, 5=STC Toggle, 6=Internal CAS Toggle, 7=Selector Secondary Loop C/A Toggle) |
| SYS2.3 | None | Short , Word, Byte | Read Only | DI1 set active 1 (0=Open for ON, 1=Closed for ON) |
| SYS2.4 | None | Short , Word, Byte | Read Only | Alarm output status 1 (0=Open, 1=Closed) |
| SYS2.5 | None | Short , Word, Byte | Read Only | SV tracking definition 1 (0=None, 1=SV, 2=PV) |
| SYS2.6 | None | Short , Word, Byte | Read Only | Selector definition 1 (0=Low selector, 1=High Selector) |
| RefreshSYS | None | Boolean | Write Only | Refreshes the SYS1 and SYS2 setting values |
| Model | None | String | Read Only | Model name 1 |
| X* | 01-05 | Float | Read Only | Analog input register |
| Y** | 01-06 | Float | Read Only | Analog output register |
| DI | 01-06 | Boolean | Read Only | Status input register |
| DO | 01-16 | Boolean | Read Only | Status output register |
| P | 01-30 | Float | Read/Write | Computation parameter register 3 |
| T | 01-30 | Float | Read Only | Temporary storage register 3 |
| K | 01-30 | Float | Read Only | Constant register 3 |

*The memory address X05 is only valid in Program Mode.

**The memory addresses Y04-Y06 are only valid in Program Mode.

Notes

1 Static Data

The data is read once at start up in order to initialize the value. To refresh the data, use the applicable Refresh Tag for all static data (with the exception of 'Model').

2 Tuning Parameters

To increase the speed of optimization, only reference the address for this data when needed. When tuning data is included in the application, it must be scanned between reads of the loop variable data.

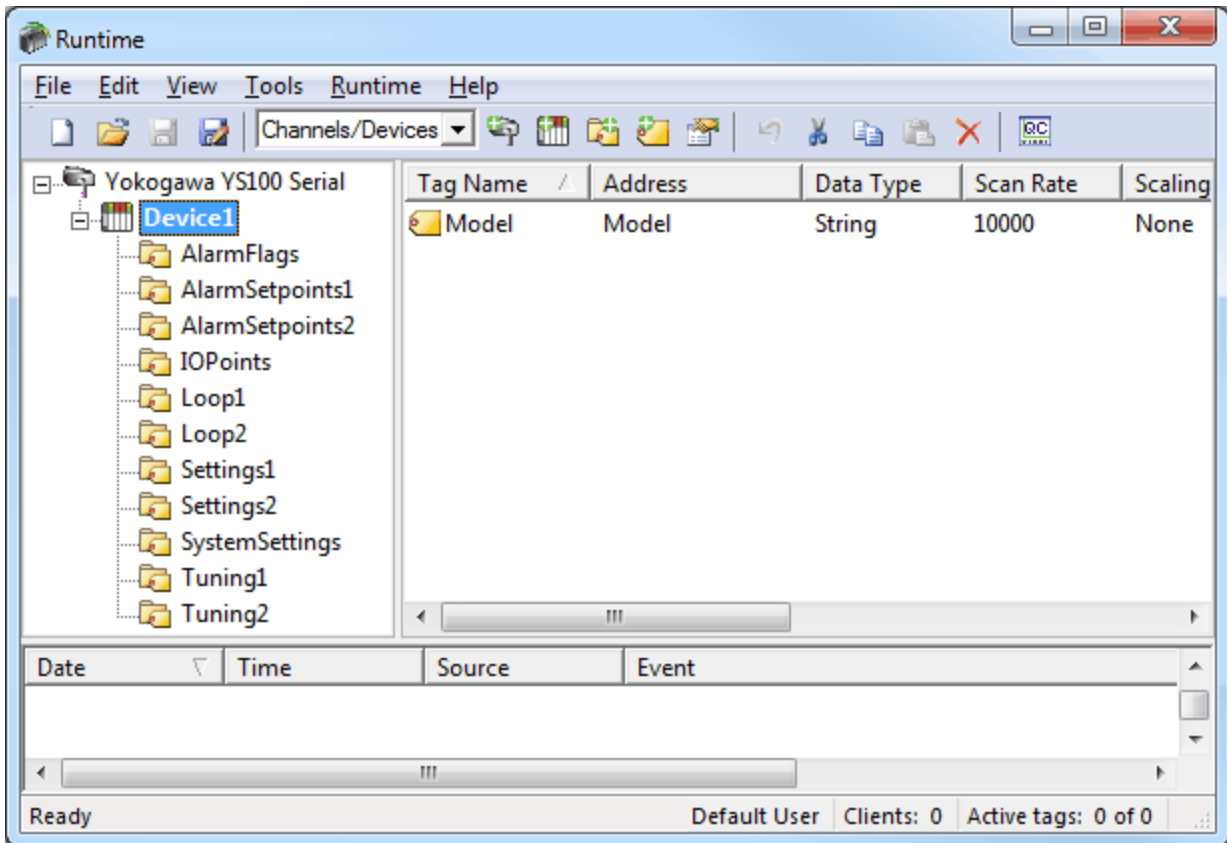
3 Computation Temporary and Constant Registers

Although register data is not generated during automatic tag generation, it can be added if needed. When register data is included in the application, it must be scanned between reads of the loop variable data.

Automatic Tag Database Generation

The Yokogawa YS100 Serial Driver utilizes the OPC server's Automatic Tag Database Generation feature by automatically creating tags through the use of a fixed database. When a device model is selected, tag and tag group generation will occur. For more information, refer to the server help file.

Note: The image below displays the results of Automatic Tag Database Creation for a YS150 device.



Error Descriptions

The following error/warning messages may be generated. Click on the link for a description of the message.

Address Validation

[Address '<address>' is out of range for the specified device or register](#)

[Data Type '<type>' is not valid for device address '<address>'](#)

[Device address '<address>' contains a syntax error](#)

[Device address '<address>' is not supported by model '<model name>'](#)

[Device address '<address>' is Read Only](#)

[Missing address](#)

Serial Communications

[Communications error on '<channel name>' \[<error mask>\]](#)

[COMn does not exist](#)

[COMn is in use by another application](#)

[Error opening COMn](#)

[Unable to set comm parameters on COMn](#)

Device Status Messages

[Device '<device name>' is not responding](#)

[Unable to write to '<address>' on device '<device name>'](#)

Yokogawa YS100 Serial Device Specific Messages

[Failed to read static initialization data for device '<device name>'](#)

[No response to watchdog write on device '<device name>'](#)

[Received unexpected response for tag in block '<tag name>' on device '<device name>'](#)

Address Validation

The following error/warning messages may be generated. Click on the link below for a description of the message.

Address Validation

[Address '<address>' is out of range for the specified device or register](#)

[Data Type '<type>' is not valid for device address '<address>'](#)

[Device address '<address>' contains a syntax error](#)

[Device address '<address>' is not supported by model '<model name>'](#)

[Device address '<address>' is Read Only](#)

[Missing address](#)

Address '<address>' is out of range for the specified device or register

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically, references a location that is beyond the range of supported locations for the device.

Solution:

Verify the address is correct; if it is not, re-enter it in the client application.

Data Type '<type>' is not valid for device address '<address>'

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically, has been assigned an invalid data type.

Solution:

Modify the requested data type in the client application.

Device address '<address>' contains a syntax error

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically contains one or more invalid characters.

Solution:

Verify the address is correct; if it is not, re-enter it in the client application.

Device address '<address>' is not supported by model '<model name>'

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically references a location that is valid for the communications protocol but not supported by the target device.

Solution:

Verify the address is correct; if it is not, re-enter it in the client application. Also verify that the selected model name for the device is correct.

Device address '<address>' is Read Only

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically, has a requested access mode that is not compatible with what the device supports for that address.

Solution:

Change the access mode in the client application.

Missing address

Error Type:

Warning

Possible Cause:

A tag address that has been specified statically has no length.

Solution:

Verify the address is correct; if it is not, re-enter it in the client application.

Serial Communications

The following error/warning messages may be generated. Click on the link below for a description of the message.

Serial Communications

[Communications error on '<channel name>' \[<error mask>\]](#)

[COMn does not exist](#)

[COMn is in use by another application](#)

[Error opening COMn](#)

[Unable to set comm parameters on COMn](#)

Communications error on '<channel name>' [<error mask>]

Error Type:

Warning

Error Mask Definitions:

B = Hardware break detected.
F = Framing error.
E = I/O error.
O = Character buffer overrun.
R = RX buffer overrun.
P = Received byte parity error.
T = TX buffer full.

Possible Cause:

1. The serial connection between the device and the host PC is bad.
2. The communication parameters for the serial connection are incorrect.
3. There is a noise source disrupting communications in the cabling path between the PC and the device.

Solution:

1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Re-route cabling to avoid sources of electrical interference; such as motors, generators or high voltage lines.

COMn does not exist

Error Type:

Fatal

Possible Cause:

The specified COM port is not present on the target computer.

Solution:

Verify that the proper COM port has been selected in the Channel Properties.

COMn is in use by another application

Error Type:

Fatal

Possible Cause:

The serial port assigned to a channel is being used by another application.

Solution:

1. Verify that the correct port has been assigned to the channel.
2. Close the other application that is using the requested COM port.

Error opening COMn

Error Type:

Fatal

Possible Cause:

The specified COM port could not be opened due to an internal hardware or software problem on the target computer.

Solution:

Verify that the COM port is functional and may be accessed by other Windows applications.

Unable to set communication parameters on COMn

Error Type:

Fatal

Possible Cause:

The serial parameters for the specified COM port are not valid.

Solution:

Verify the serial parameters and make any necessary changes.

Device Status Messages

The following error/warning messages may be generated. Click on the link below for a description of the message.

Device Status Messages

[Device '<device name>' is not responding](#)

[Unable to write to '<address>' on device '<device name>'](#)

Device '<device name>' is not responding

Error Type:

Serious

Possible Cause:

1. The serial connection between the device and the host PC is broken.
2. The communication parameters for the serial connection are incorrect.
3. The named device may have been assigned an incorrect Network ID.
4. The response from the device took longer to receive than the amount of time specified in the "Request Timeout" device setting.

Solution:

1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Verify that the Network ID given to the named device matches that of the actual device.
4. Increase the Request Timeout setting so that the entire response can be handled.

Unable to write to '<address>' on device '<device name>'

Error Type:

Serious

Possible Cause:

1. The serial connection between the device and the host PC is broken.
2. The communication parameters for the serial connection are incorrect.
3. The named device may have been assigned an incorrect Network ID.

Solution:

1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Verify that the Network ID given to the named device matches that of the actual device.

YS100 Serial Device Specific Messages

The following error/warning messages may be generated. Click on the link below for a description of the message.

YS100 Serial Device Specific Messages

[Failed to read static initialization data for device '<device name>'](#)

[No response to watchdog write on device '<device name>'](#)

[Received unexpected response for tag in block '<tag name>' on device '<device name>'](#)

Failed to read static initialization data for device '<device name>'

Error Type:

Serious

Possible Cause:

1. The serial connection between the device and the host PC is broken.
2. The communication parameters for the serial connection are incorrect.
3. The named device may have been assigned an incorrect Network ID.

Solution:

1. Verify the cabling between the PC and the device.
2. Verify that the specified communication parameters match those of the device.
3. Verify that the Network ID given to the named device matches that of the actual device.

No response to watchdog write on device '<device name>'

Error Type:

Serious

Possible Cause:

The driver did not receive a response to the watchdog timer command. Either the device is unable to accept the watchdog timer command or the device is not responding.

Solution:

Check communication parameters and cabling then restart the server.

Received unexpected response for tag in block '<tag name>' on device '<device name>'

Error Type:

Serious

Possible Cause:

1. An attempt has been made to reference a nonexistent location in the specified device.
2. If there was a break in connection between the driver and the device, the device may respond with a buffered response before responding to the current request.

Solution:

1. Verify the tags assigned to addresses in the specified range on the device and eliminate those that reference invalid locations.
2. If there was a cable disconnect, the driver will resynch with the device.

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