Industrial communication solutions for Windows

XZETMODB Driver Manual

Zetron M1708/1716 Modbus Protocol Driver

Contents

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Industrial communication drivers.

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XZETMODB technical specifications

General information

XZETMODB driver allows you to connect to ZETRON 1708/1716 RTUs using 1730 controllers via the Modbus RTU protocol.

Recomended configuration for the controller:

- Using the RTU Configuration Utility, select the Modbus protocol instead of the UltraW protocol.
- In the Modbus Setup window, add each 1708/1716 RTU and select the proper address and the "Enabled" option.
- Set the polling intervals and enable the autopolling option.
- Enable exception reports in the RTU is not recomended.

Command list

Read Analog and Digital Inputs from 1708 RTU

Description of this command:
Retrieve the current status of 4 analog inputs and 8 digital inputs from a 1708 RTU.
Methods used to run this command:
Analog Input
Number of points accepted by this command:
12
Meaning of the DriverP0 parameter:
Indicates the RTU address (1-255).
Meaning of the DriverP1 parameter:
0
Values that are returned:
Value in PointValue (0) = Module's Analog Input 1
Value in PointValue (1) = Module's Analog Input 2
Value in PointValue (2) = Module's Analog Input 3
Value in PointValue (3) = Module's Analog Input 4
Value in PointValue (4) = Module's Digital I/O Input 1
Value in PointValue (5) = Module's Digital I/O Input 2
Value in PointValue (6) = Module's Digital I/O Input 3
Value in PointValue (7) = Module's Digital I/O Input 4
Value in PointValue (8) = Module's Digital I/O Input 5
Value in PointValue (9) = Module's Digital I/O Input 6
Value in PointValue (10) = Module's Digital I/O Input 7
Value in PointValue (11) = Module's Digital I/O Input 8

Read Analog and Digital Inputs from 1716 RTU

Description of this command:
Retrieve the current status of 8 analog inputs and 16 digital inputs from a 1716 RTU.
Methods used to run this command:
Analog Input
Number of points accepted by this command:
24
Meaning of the DriverP0 parameter:
Indicates the RTU address (1-255).
Meaning of the DriverP1 parameter:
1
Values that are returned:
Value in PointValue (0) = Module's Analog Input 1
Value in PointValue (1) = Module's Analog Input 2

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Value in PointValue (2) = Module's Analog Input 3
Value in PointValue (3) = Module's Analog Input 4
Value in PointValue (4) = Module's Analog Input 5
Value in PointValue (5) = Module's Analog Input 6
Value in PointValue (6) = Module's Analog Input 7
Value in PointValue (7) = Module's Analog Input 8
Value in PointValue (8) = Module's Digital I/O Input 1
Value in PointValue (9) = Module's Digital I/O Input 2
Value in PointValue (10) = Module's Digital I/O Input 3
Value in PointValue (11) = Module's Digital I/O Input 4
Value in PointValue (12) = Module's Digital I/O Input 5
Value in PointValue (13) = Module's Digital I/O Input 6
Value in PointValue (14) = Module's Digital I/O Input 7
Value in PointValue (15) = Module's Digital I/O Input 8
Value in PointValue (16) = Module's Digital I/O Input 9
Value in PointValue (17) = Module's Digital I/O Input 10
Value in PointValue (18) = Module's Digital I/O Input 11
Value in PointValue (19) = Module's Digital I/O Input 12
Value in PointValue (20) = Module's Digital I/O Input 13
Value in PointValue (21) = Module's Digital I/O Input 14
Value in PointValue (22) = Module's Digital I/O Input 15
Value in PointValue (23) = Module's Digital I/O Input 16

Set Digital Output

Description of this command:
Set the status of one digital output at either a 1708 or 1716 RTU.
Methods used to run this command:
Digital Output
Number of points accepted by this command:
1
Meaning of the DriverP0 parameter:
Indicates the remote station address (0-255).
Meaning of the DriverP1 parameter:
0
Meaning of the DriverP2 parameter:
Indicates the coil number to be set (1 to 8 for 1708, 1 to 16 for 1716)
Values that are sent:
Value in PointValue (0) = New Digital Output Value (0 or 1)

Error messages

The following list shows the possible error messages that can be returned by the driver during a failed communication in the 'Status' property.

[1005] DRIVER (Internal): Invalid driver stage
[1300] PROTOCOL (Timeout): No answer
[1421] PROTOCOL (Format): Negative acknowledge received from device
[2001] CONFIG (DataType): Analog outputs are not supported by this driver
[2002] CONFIG (DataType): Digital inputs are not supported by this driver
[2185] CONFIG (NumValues): Too many values (max=1)
[2185] CONFIG (NumValues): Too many values (max=12)
[2185] REMOTE: Value was not set properly
[2229] CONFIG (NumValues): Too many values (max=24)
[3022] CONFIG (P0): Invalid device address (1-255)
[3022] CONFIG (P2): Invalid output (1-16)
[3022] CONFIG (P2): Invalid output (1-8)
[3022] CONFIG (P3): Invalid dlay value (0-30000)
[3508] CONFIG (P1): Invalid command
[8013] CONFIG (Remote): Acknowledge
[8034] CONFIG (Remote): Busy (rejected message)
[8138] CONFIG (Remote): Failure in associated device

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[8168] CONFIG (Remote): Illegal data address
[8170] CONFIG (Remote): Illegal data value
[8172] CONFIG (Remote): Illegal function
[8347] CONFIG (Remote): Unknown error

Supported devices

This driver can communicate with these devices, but is not necessarily limited to this list:

ZETRON M1730 Controller with 1708/1716 RTUs

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