

# Industrial communication solutions for Windows

## XAIBUS Driver Manual

*Yudian AI-BUS Protocol Driver*

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Industrial communication drivers.

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## XAIBUS technical specifications

### General information

XAIBUS driver allows you to connect to any equipment which uses the Yudian AI-BUS Protocol. This driver was developed by Jiantao Yu from China. This driver implements Read/Write Register as they are described in the Yudian AI-BUs Protocol Manual. This driver expects that you connect to your device through its serial port. The device should behave as a slave in your RS-232/485 network.  
*Required communication settings:*  
*BaudRate: 1200-19200 bps Parity: None DataBits: 8 StopBits: 1 or 2*

### Command list

#### Read Register

**Description of this command:**

Obtains current values.

**Methods used to run this command:**

Analog Input

**Number of points accepted by this command:**

1-5

**Meaning of the DriverP0 parameter:**

Station number (0-100).

**Meaning of the DriverP1 parameter:**

0

**Meaning of the DriverP2 parameter:**

Indicates the register address (0-255).

**Values that are returned:**

Value in PointValue (0) = Register value  
Value in PointValue (1) = PV  
Value in PointValue (2) = SV  
Value in PointValue (3) = MV  
Value in PointValue (4) = Alarm Status

#### Preset Register as Signed 16-bit Integer

**Description of this command:**

Places a specified value into a register as an signed 16-bit integer value from -32768 to 32767. The device also returns current values.

**Methods used to run this command:**

Analog Output

**Number of points accepted by this command:**

1-5

**Meaning of the DriverP0 parameter:**

Station number (0-100).

**Meaning of the DriverP1 parameter:**

0

**Meaning of the DriverP2 parameter:**

Indicates the register address (0-255).

**Values that are sent:**

Value in PointValue (0) = New register value (-32768-32767)  
Value in PointValue (1) = PV  
Value in PointValue (2) = SV  
Value in PointValue (3) = MV  
Value in PointValue (4) = Alarm Status

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## Error messages

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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
- [2002] CONFIG (DataType): Digital inputs are not supported by this driver
- [2003] CONFIG (DataType): Digital outputs are not supported by this driver
- [2185] CONFIG (NumValues): Too many values (max=5)
- [3014] CONFIG (P0): Invalid device address (0-100)
- [3015] CONFIG (P1): Invalid extended address
- [4001] CONFIG (P2): Invalid address
- [8146] CONFIG (Remote): Frame checksum error (FCS)

## Supported devices

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

Yudian AI Series

CPKSoft Engineering

Industrial communication  
drivers.

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