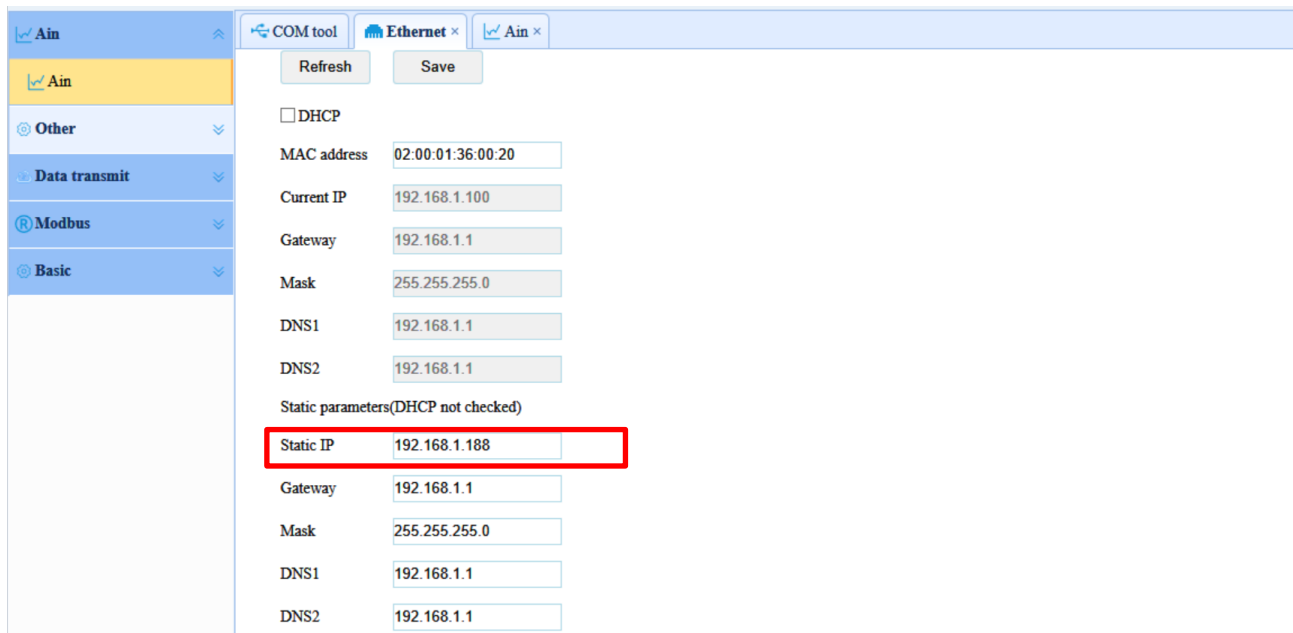


Test Modbus TCP by Modbus poll

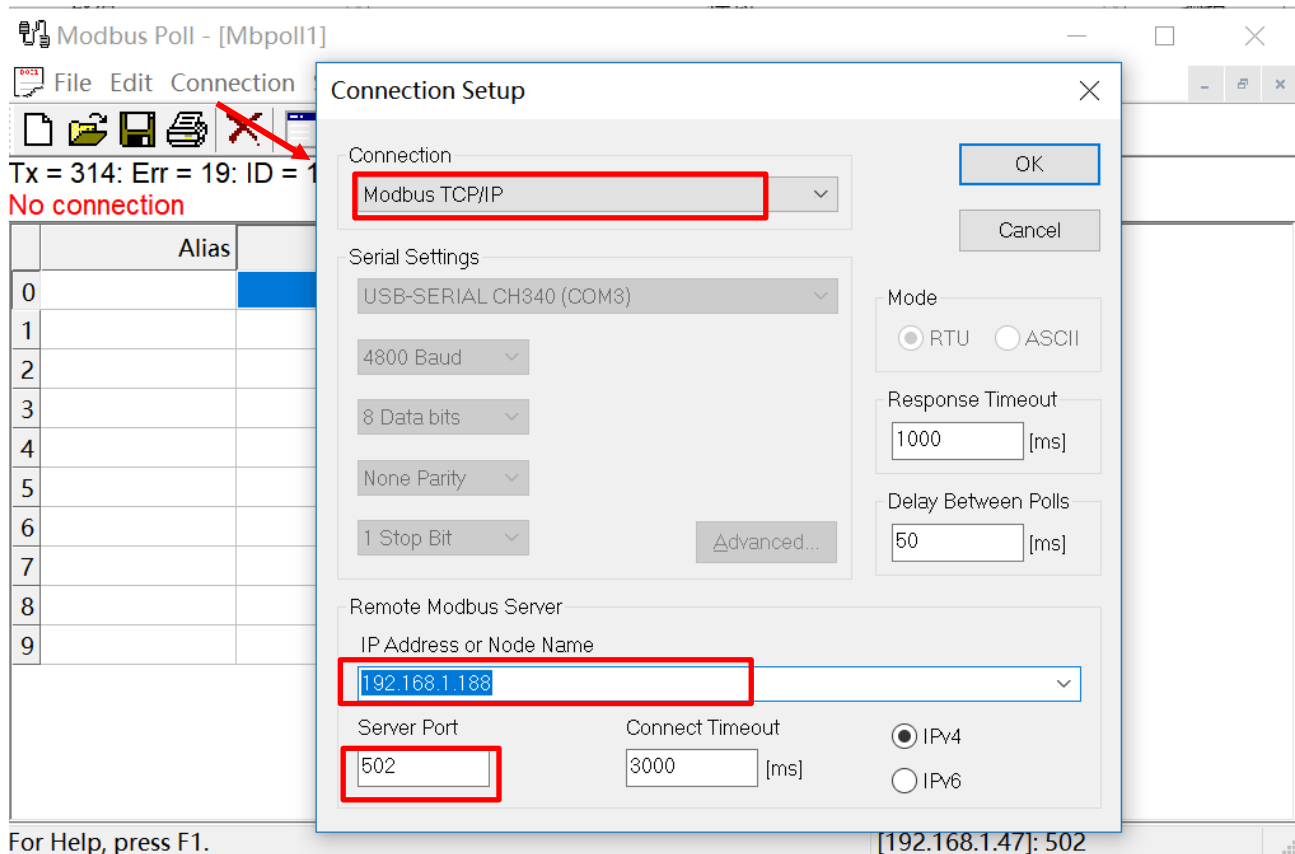
Setup IP address



The screenshot shows the 'Ethernet' configuration window in the COM tool. The 'Static IP' field is highlighted with a red box, indicating the IP address to be set. The 'Current IP' is 192.168.1.100, and the 'Static IP' is 192.168.1.188. Other fields include MAC address, Gateway, Mask, DNS1, and DNS2.

Restart device after set IP address

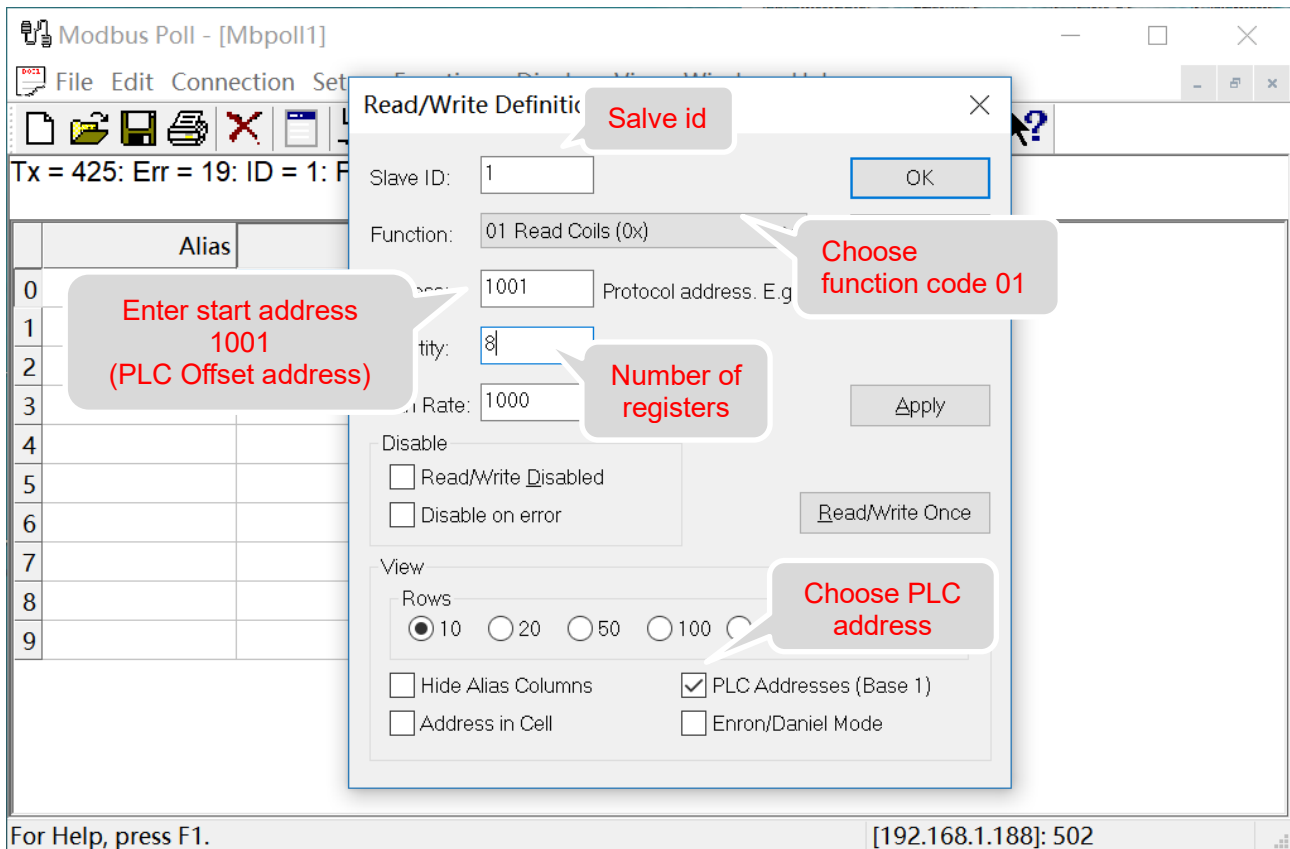
Run Modbus Poll and connect the IP address



The screenshot shows the 'Modbus Poll - [Mbpoll1]' window. The 'Connection Setup' dialog box is open, showing the 'Modbus TCP/IP' connection type selected. The 'IP Address or Node Name' is set to '192.168.1.188', and the 'Server Port' is set to '502'. The 'Serial Settings' section shows 'USB-SERIAL CH340 (COM3)' selected. The 'Mode' is set to 'RTU', and the 'Response Timeout' is 1000 ms. The 'Delay Between Polls' is 50 ms. The 'Connect Timeout' is 3000 ms. The 'Server Port' is 502. The 'IP Address or Node Name' is 192.168.1.188. The 'Connection' type is Modbus TCP/IP. The 'Connection Setup' dialog box has 'OK' and 'Cancel' buttons. The 'Modbus Poll - [Mbpoll1]' window shows a table with 'Alias' and 'Data' columns. The status bar at the bottom shows 'For Help, press F1.' and '[192.168.1.47]: 502'.

1. Read digital input

For example, read 8 channels Di, slave id=1

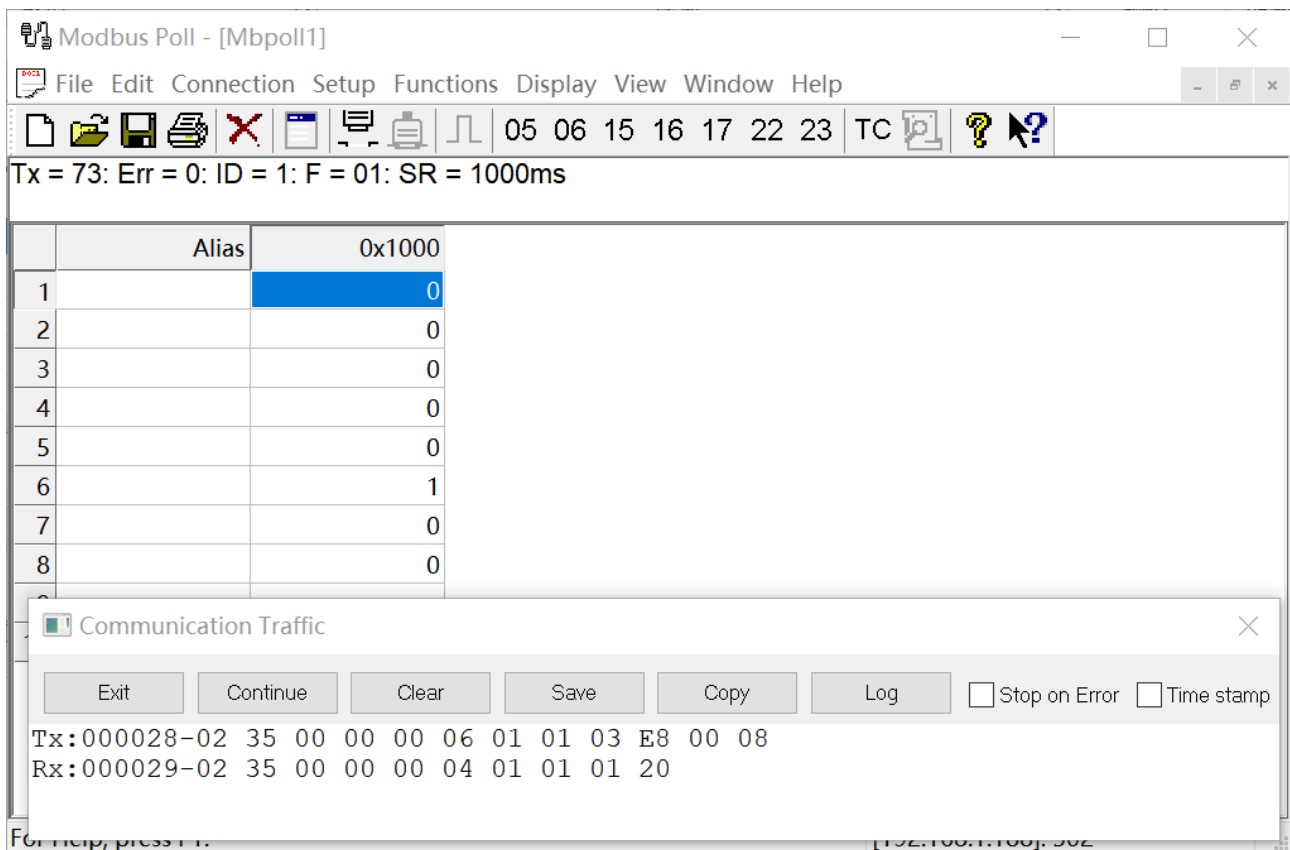


The screenshot shows the 'Read/Write Definition' dialog box in the Modbus Poll software. The dialog is configured for a 'Read Coils (0x)' operation. The 'Slave ID' is set to 1. The 'Function' is '01 Read Coils (0x)'. The 'Protocol address' is 1001. The 'Quantity' is 8. The 'Rate' is 1000. The 'View' section shows 'Rows' set to 10, 'PLC Addresses (Base 1)' checked, and 'Enron/Daniel Mode' unchecked. The 'Disable' section has 'Read/Write Disabled' and 'Disable on error' unchecked. The 'Read/Write Once' button is visible. The background shows a table with columns 'Alias' and '0x1000'.

Annotations:

- Slave id:** Points to the 'Slave ID' field.
- Choose function code 01:** Points to the 'Function' field.
- Enter start address 1001 (PLC Offset address):** Points to the 'Protocol address' field.
- Number of registers:** Points to the 'Quantity' field.
- Choose PLC address:** Points to the 'Rows' radio button.

For Help, press F1. [192.168.1.188]: 502



The screenshot shows the main window of the Modbus Poll software. The status bar at the top indicates 'Tx = 73: Err = 0: ID = 1: F = 01: SR = 1000ms'. The main table displays data for 8 channels (rows 1-8) under the 'Alias' column and '0x1000' column. The values are 0, 0, 0, 0, 0, 1, 0, 0 respectively.

Communication Traffic Dialog:

The 'Communication Traffic' dialog box is open, showing the following data:

```

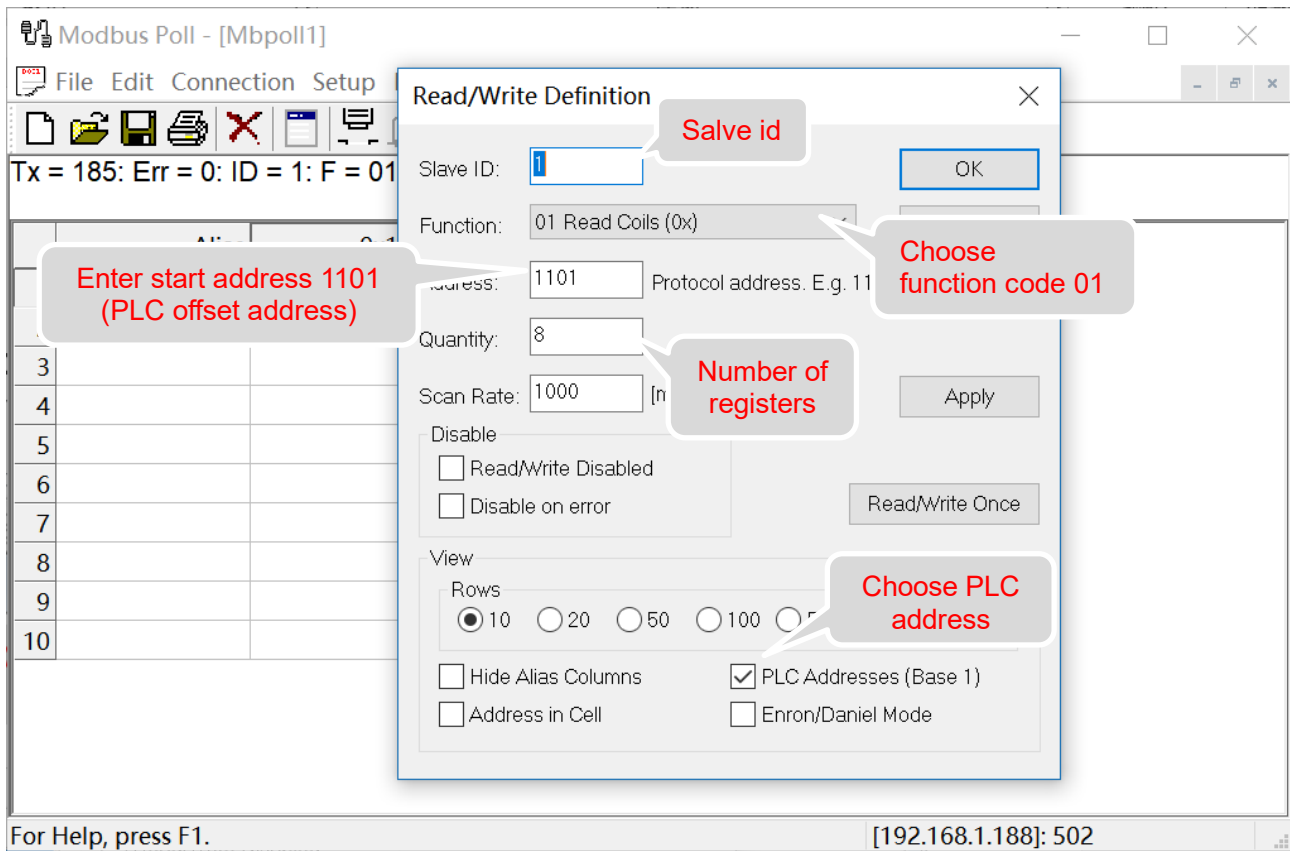
Tx: 000028-02 35 00 00 00 06 01 01 03 E8 00 08
Rx: 000029-02 35 00 00 00 04 01 01 01 20
  
```

Buttons: Exit, Continue, Clear, Save, Copy, Log, Stop on Error, Time stamp.

For Help, press F1. [192.168.1.188]: 502

2. Read digital output

Fox example, read 8 channels Do, slave id=1



Read/Write Definition

Slave ID: 1 (Slave id)

Function: 01 Read Coils (0x) (Choose function code 01)

Address: 1101 (Enter start address 1101 (PLC offset address))

Quantity: 8 (Number of registers)

Scan Rate: 1000 [n]

Disable:

- ☐ Read/Write Disabled
- ☐ Disable on error

View:

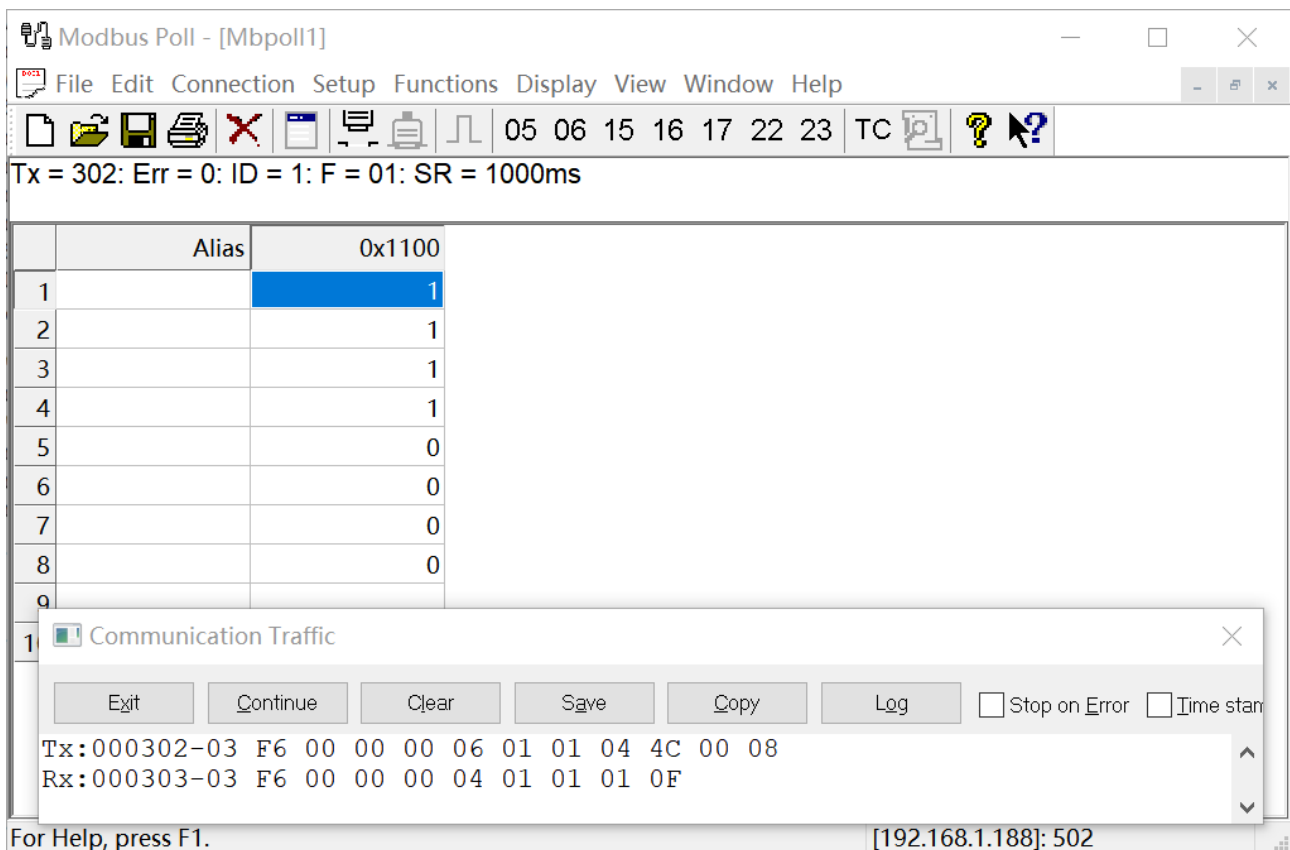
Rows: ☒ 10 ☐ 20 ☐ 50 ☐ 100 ☐ 500

☐ Hide Alias Columns ☒ PLC Addresses (Base 1) (Choose PLC address)

☐ Address in Cell ☐ Enron/Daniel Mode

Buttons: OK, Apply, Read/Write Once

For Help, press F1. [192.168.1.188]: 502



Modbus Poll - [Mbpoll1]

File Edit Connection Setup Functions Display View Window Help

Tx = 302: Err = 0: ID = 1: F = 01: SR = 1000ms

	Alias	0x1100
1		1
2		1
3		1
4		1
5		0
6		0
7		0
8		0

Communication Traffic

Exit Continue Clear Save Copy Log ☐ Stop on Error ☐ Time stamp

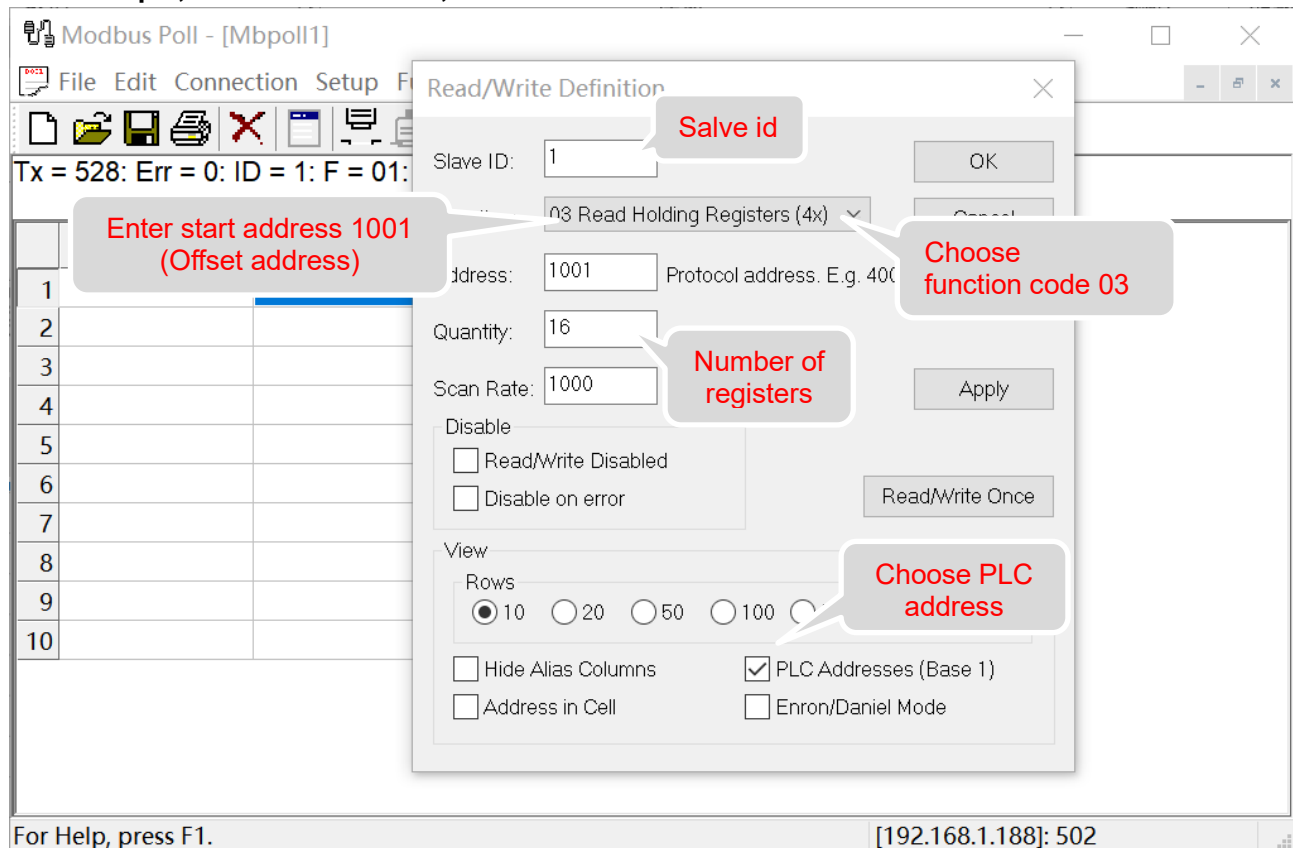
Tx: 000302-03 F6 00 00 00 06 01 01 04 4C 00 08

Rx: 000303-03 F6 00 00 00 04 01 01 01 0F

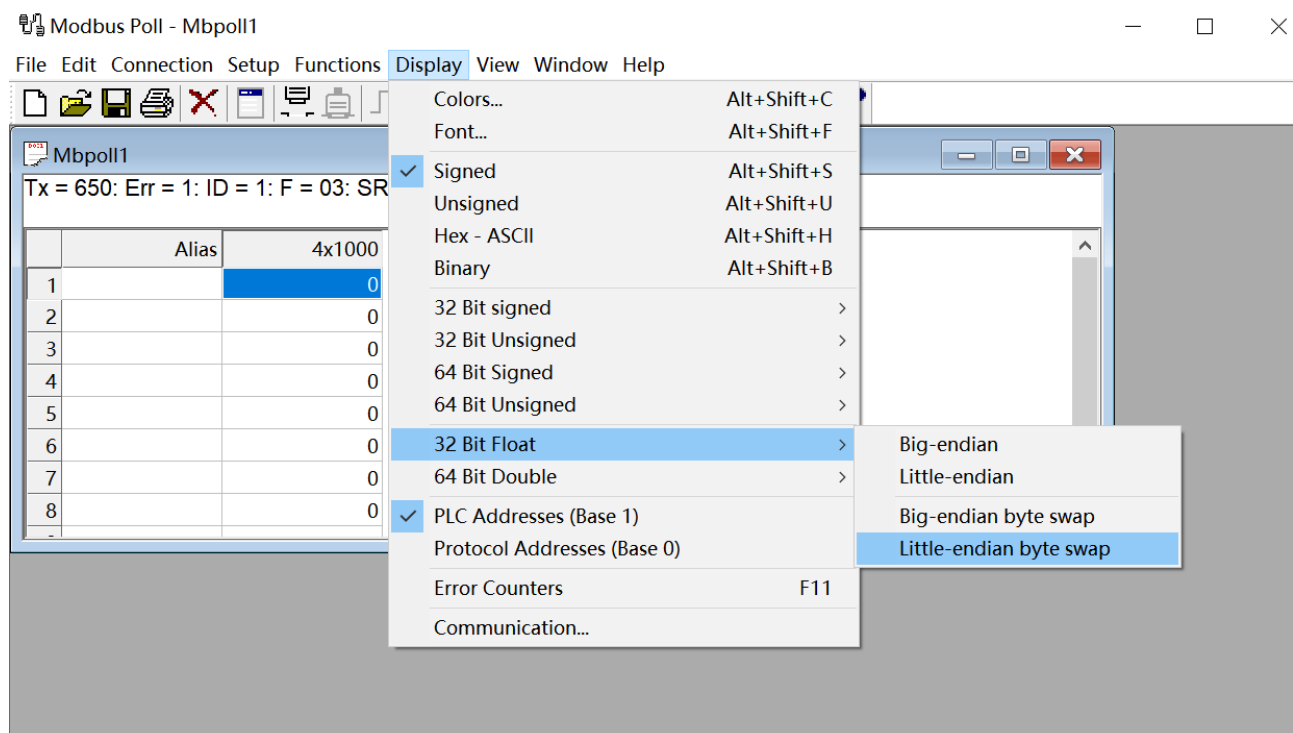
For Help, press F1. [192.168.1.188]: 502

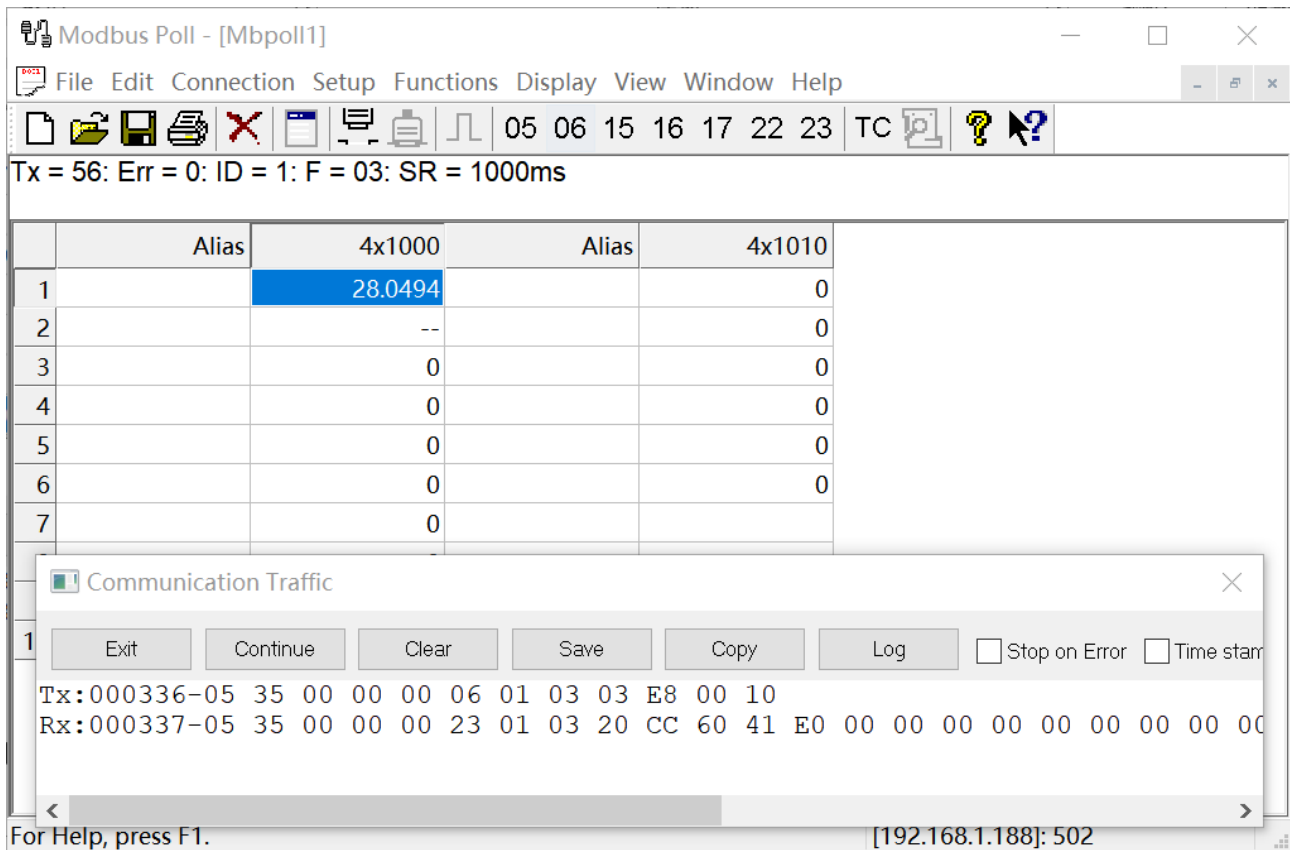
3. Read analog input

Fox example, read 8 channels Ai, slave id=1



Choose 32 Bit Float





Modbus Poll - [Mbpoll1]

File Edit Connection Setup Functions Display View Window Help

Tx = 56: Err = 0: ID = 1: F = 03: SR = 1000ms

	Alias	4x1000	Alias	4x1010
1		28.0494		0
2		--		0
3		0		0
4		0		0
5		0		0
6		0		0
7		0		0

Communication Traffic

Exit Continue Clear Save Copy Log ☐ Stop on Error ☐ Time stamp

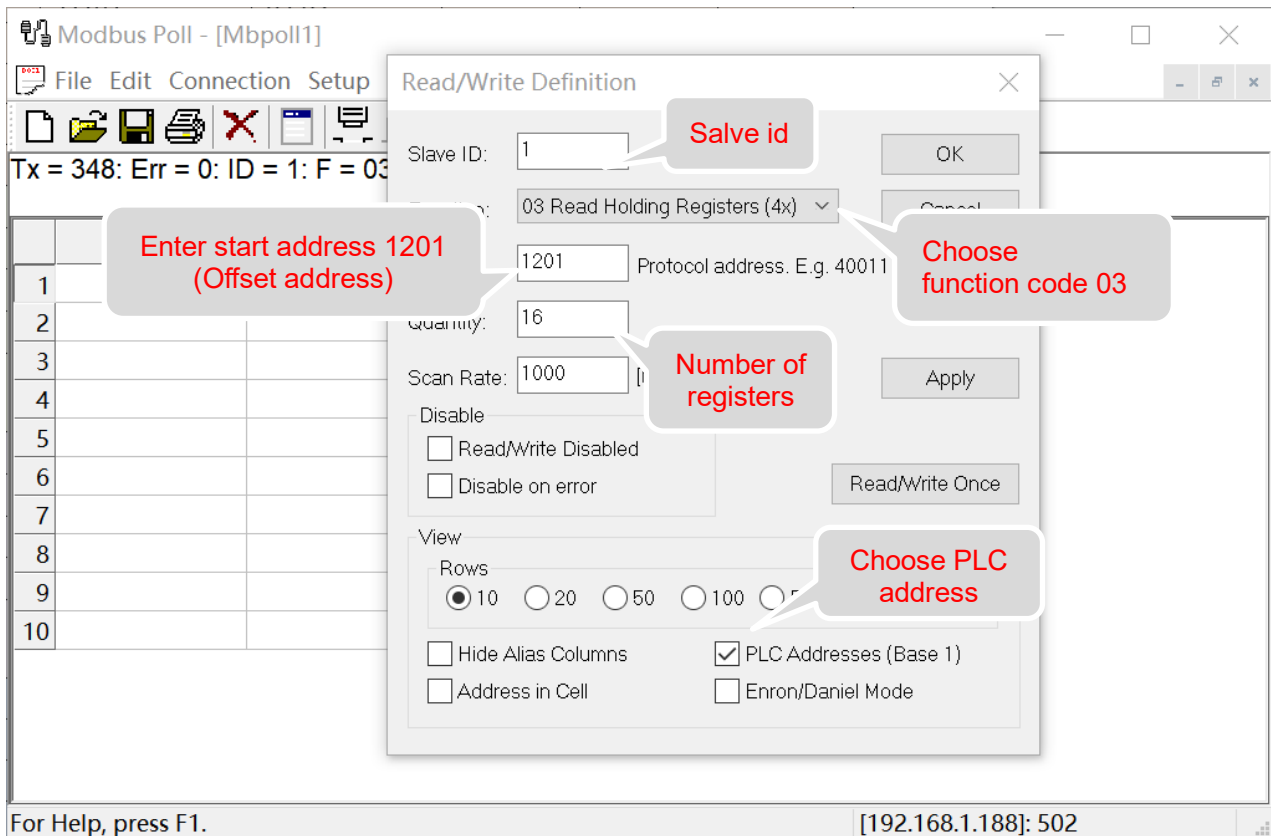
Tx: 000336-05 35 00 00 00 06 01 03 03 E8 00 10

Rx: 000337-05 35 00 00 00 23 01 03 20 CC 60 41 E0 00 00 00 00 00 00 00 00 00

For Help, press F1. [192.168.1.188]: 502

4. Read temperature input

For example, read 8 channels of T_i , slave id=1



Modbus Poll - [Mbpoll1]

File Edit Connection Setup

Tx = 348: Err = 0: ID = 1: F = 03

Read/Write Definition

Slave ID: 1 **Slave id**

Function: 03 Read Holding Registers (4x) **Choose function code 03**

Start Address: 1201 **Enter start address 1201 (Offset address)**

Quantity: 16 **Number of registers**

Scan Rate: 1000

Disable ☐ Read/Write Disabled ☐ Disable on error

View Rows ☒ 10 ☐ 20 ☐ 50 ☐ 100 **Choose PLC address**

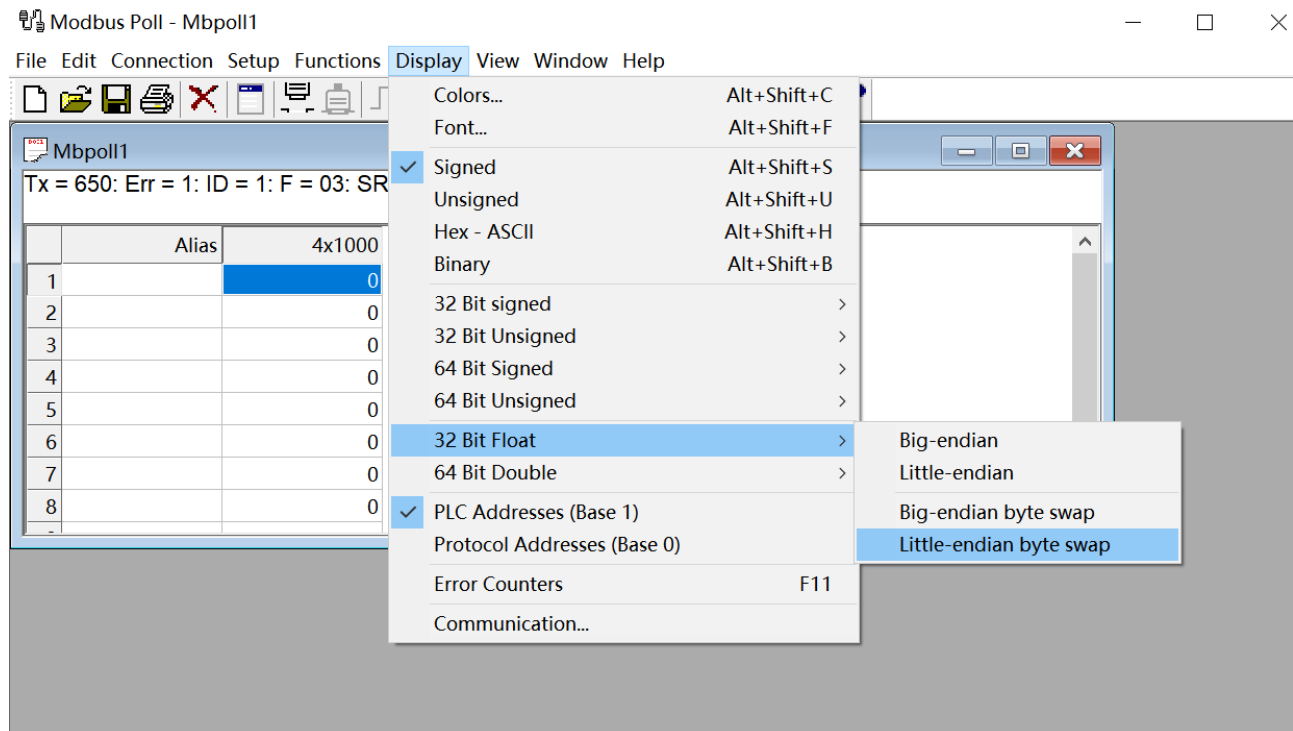
☐ Hide Alias Columns ☒ PLC Addresses (Base 1) ☐ Enron/Daniel Mode

☐ Address in Cell

OK Cancel Apply Read/Write Once

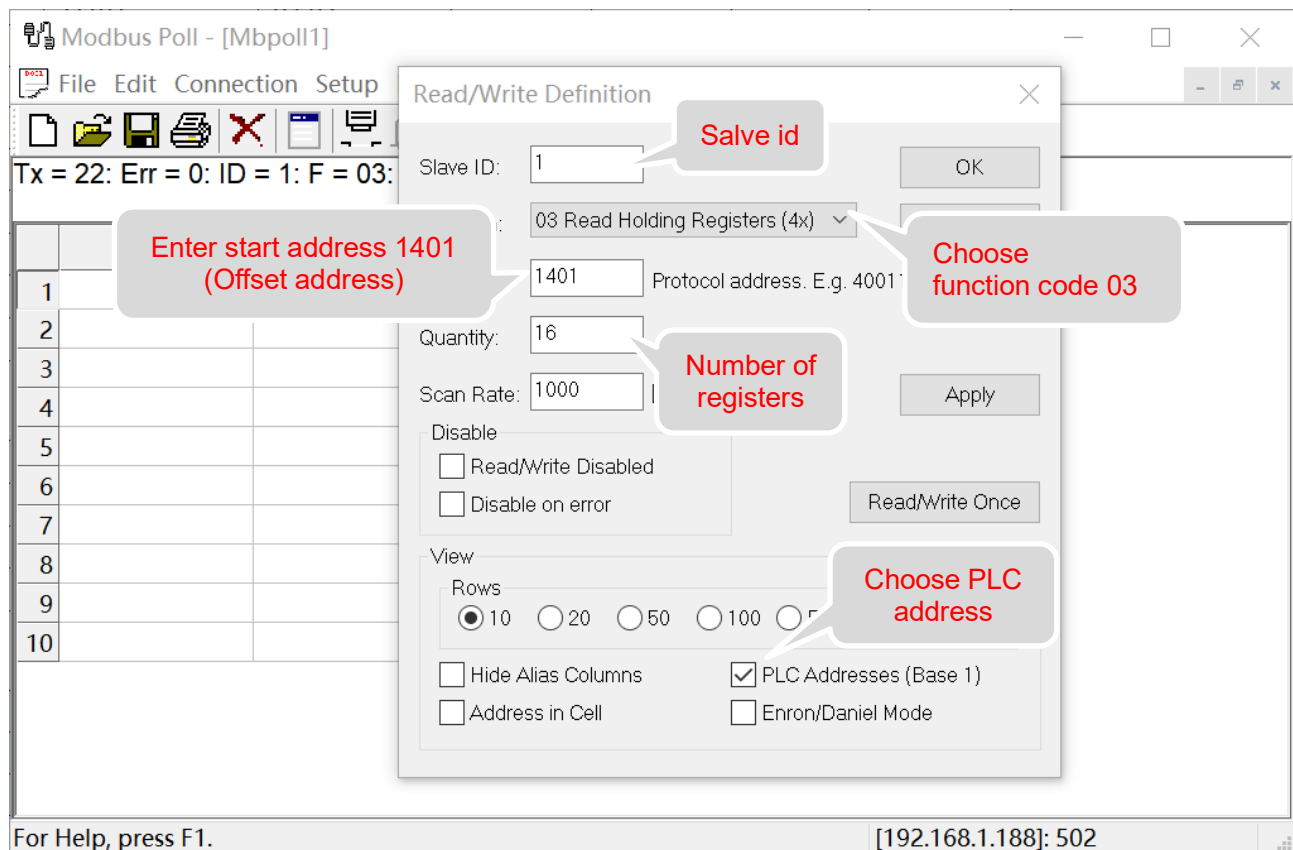
For Help, press F1. [192.168.1.188]: 502

Choose 32 Bit Float



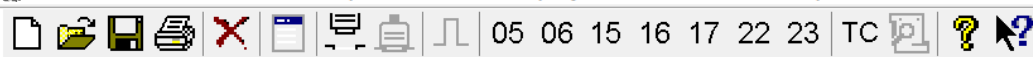
5. Read Modbus register on RS485

For example, read 8 registers, slave id=1



Modbus Poll - [Mbpoll1]

File Edit Connection Setup Functions Display View Window Help


05 06 15 16 17 22 23 TC ? ?

Tx = 35: Err = 0: ID = 1: F = 03: SR = 1000ms

	Alias	4x1400	Alias	4x1410
1		59.1		0
2		--		--
3		30		0
4		--		--
5		0		0
6		--		--
7		0		
8		--		
9		0		

Communication Traffic

Exit Continue Clear Save Copy Log ☐ Stop on Error ☐ Time stamp

Tx:000366-09 8E 00 00 00 06 01 03 05 78 00 10
Rx:000367-09 8E 00 00 00 23 01 03 20 CC CD 42 6C 00 00 41 F0 00 00 00 00 00

< [192.168.1.188]: 502 >

For Help, press F1.