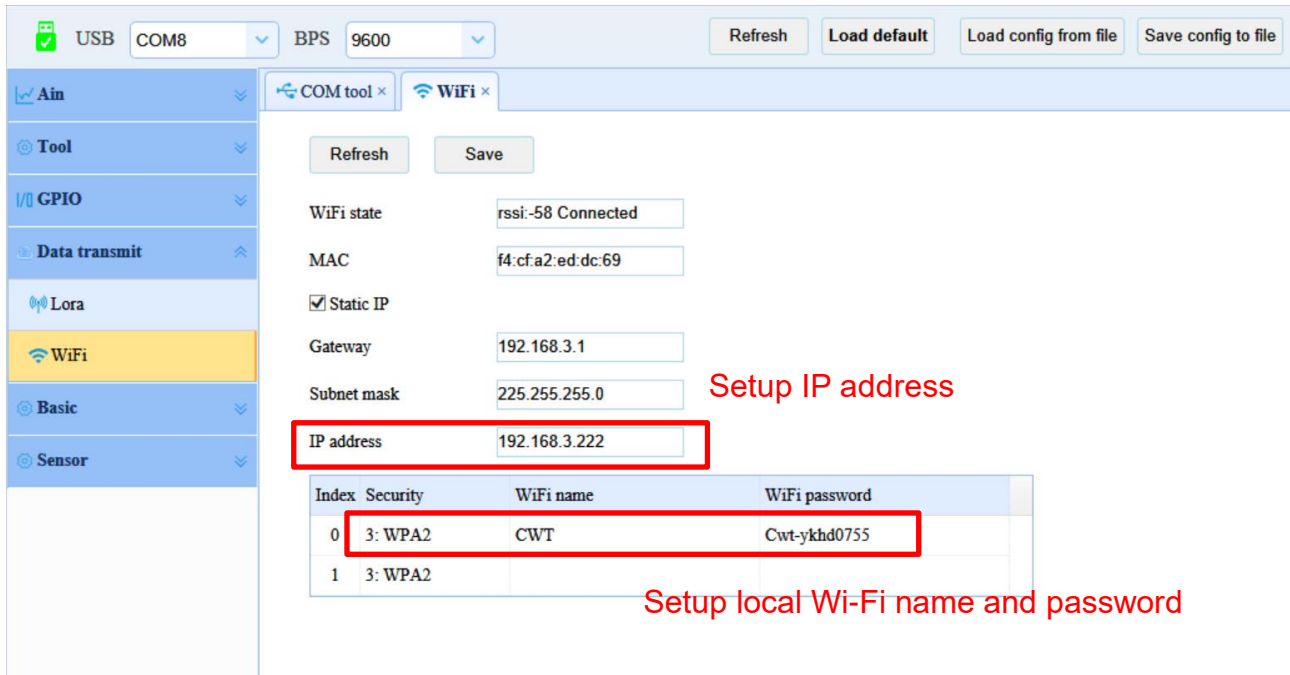


## Test Modbus TCP by Modbus poll

Setup IP address for Modbus io module.



Refresh Save

WiFi state: rssi:-58 Connected

MAC: f4:cf:a2:ed:dc:69

☒ Static IP

Gateway: 192.168.3.1

Subnet mask: 225.255.255.0

IP address: 192.168.3.222

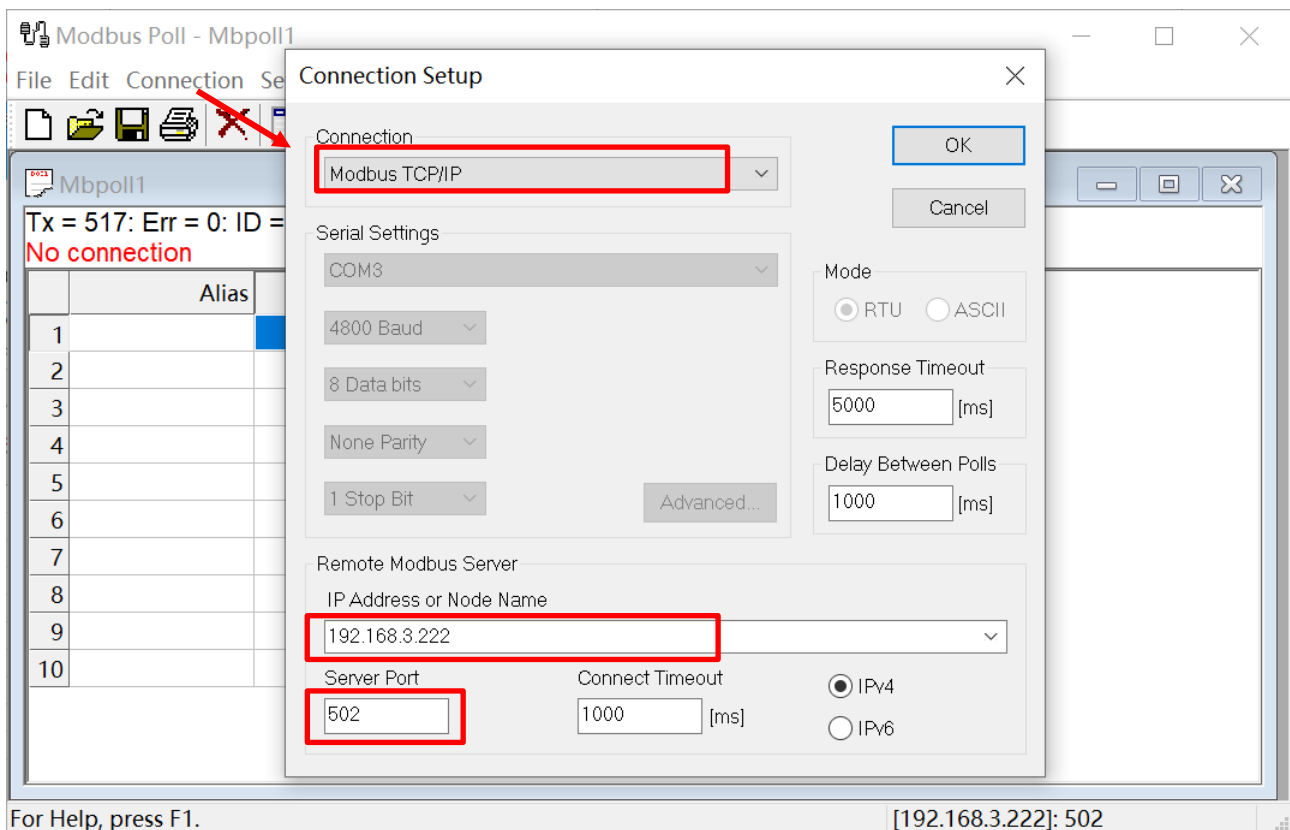
Setup IP address

Index	Security	WiFi name	WiFi password
0	3: WPA2	CWT	Cwt-ykhd0755
1	3: WPA2		

Setup local Wi-Fi name and password

Restart Modbus io module after setup

Run Modbus Poll and connect the IP address



Modbus Poll - Mbpoll1

File Edit Connection Settings

Tx = 517: Err = 0: ID =  
 No connection

Alias

1	2	3	4	5	6	7	8	9	10

Connection Setup

Connection: Modbus TCP/IP

Serial Settings

COM3

4800 Baud

8 Data bits

None Parity

1 Stop Bit

Advanced...

Mode

☒ RTU ☐ ASCII

Response Timeout: 5000 [ms]

Delay Between Polls: 1000 [ms]

Remote Modbus Server

IP Address or Node Name: 192.168.3.222

Server Port: 502

Connect Timeout: 1000 [ms]

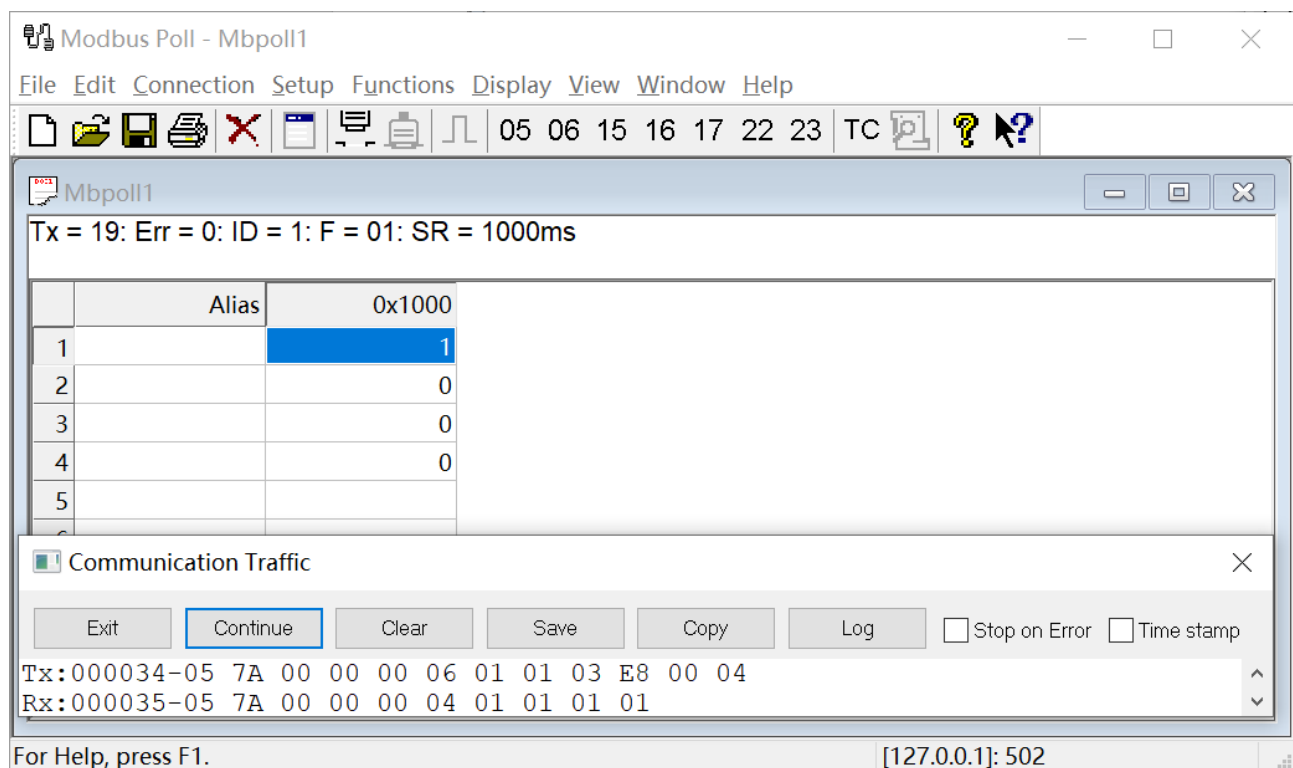
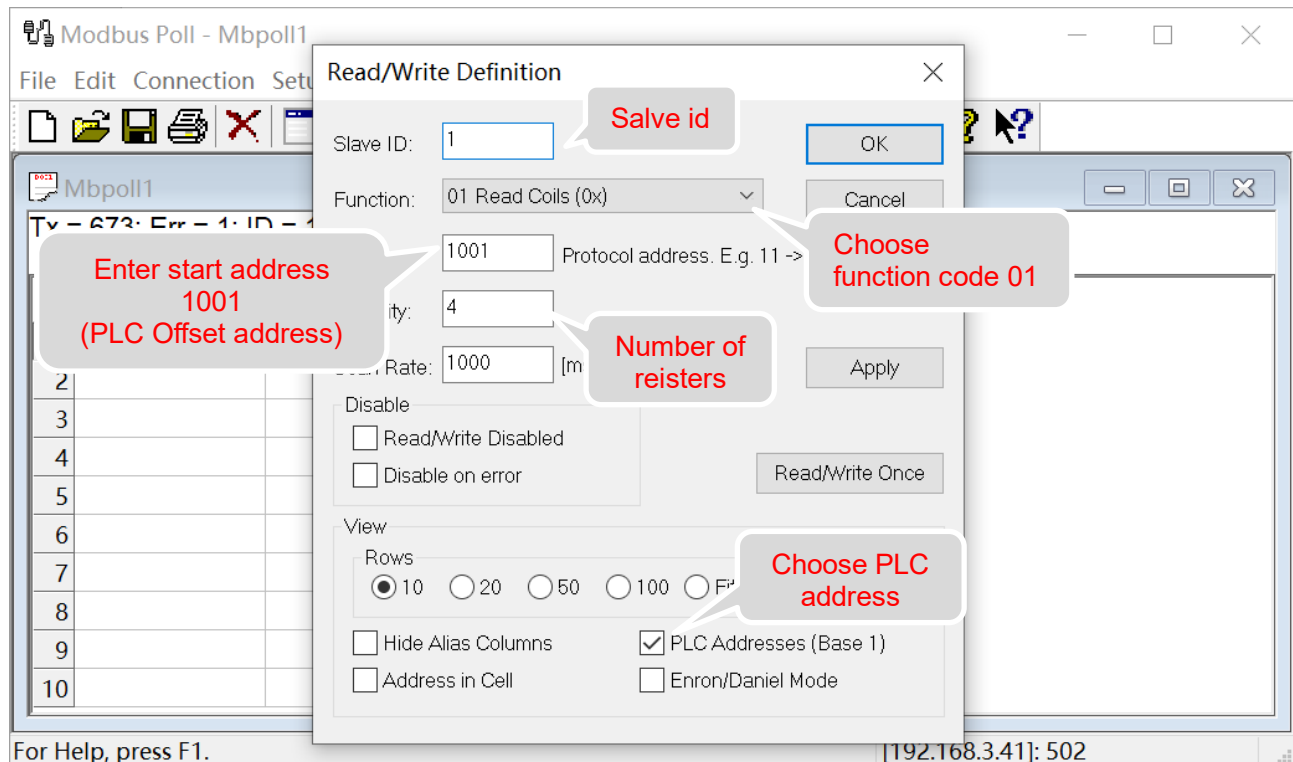
☒ IPv4 ☐ IPv6

OK Cancel

For Help, press F1. [192.168.3.222]: 502

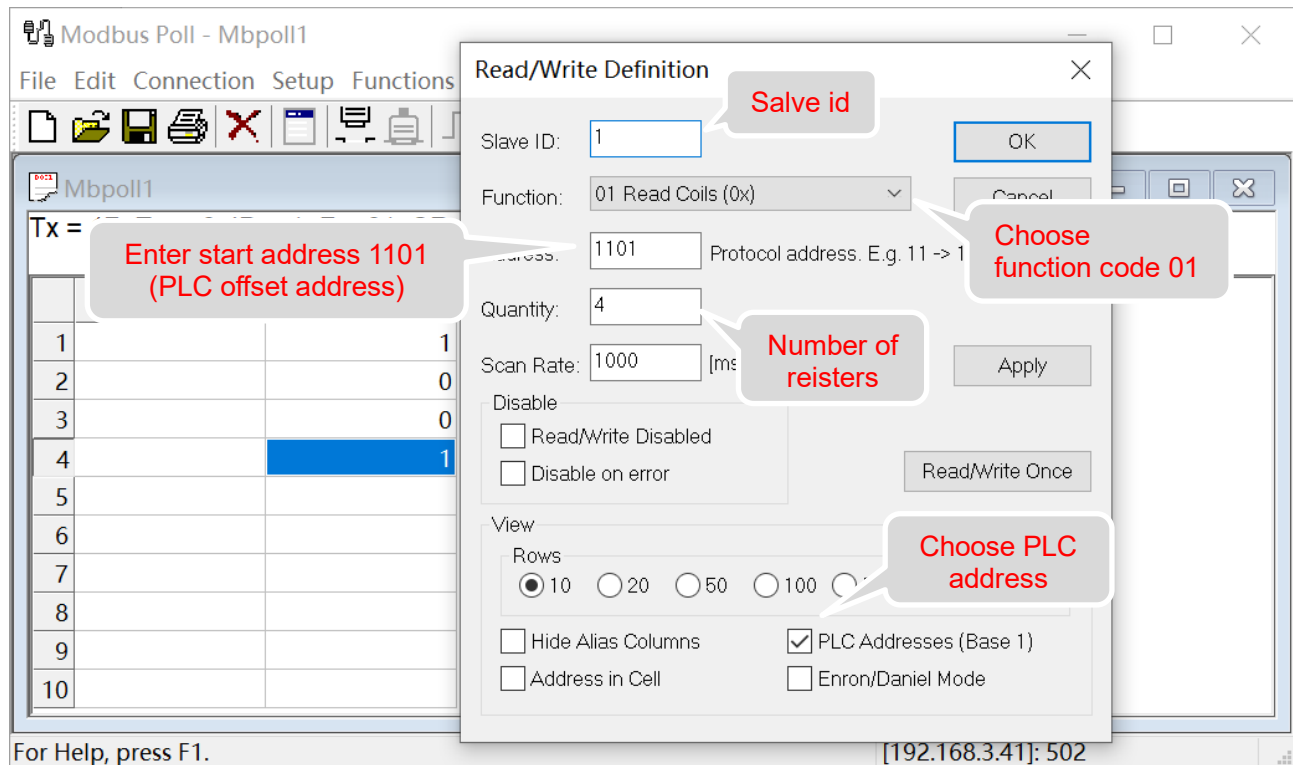
## 1. Read digital input

For example, read 4 channels of Di, slave id=1



## 2. Read digital output

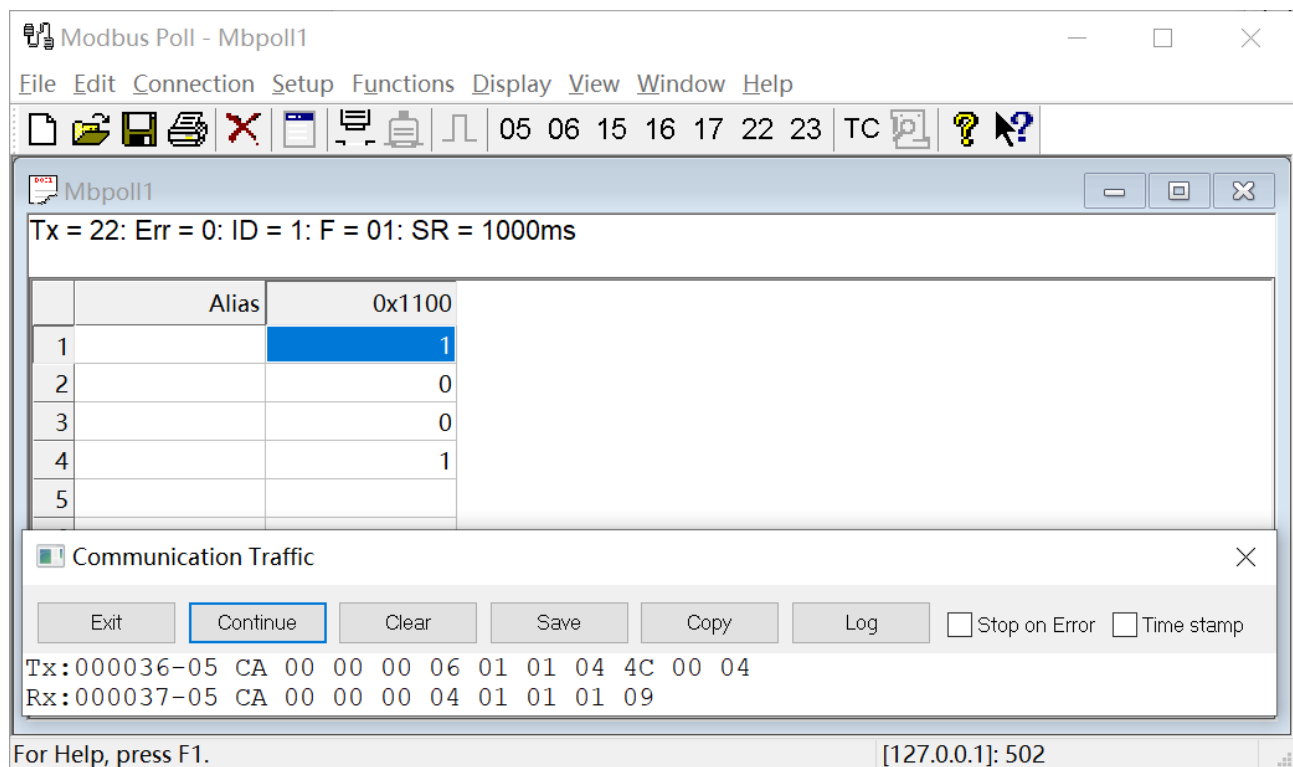
For example, read 4 channels of Do, slave id=1



The screenshot shows the Modbus Poll - Mbpoll1 application window. The 'Read/Write Definition' dialog box is open, and several fields are annotated with red callouts:

- Slave ID:** 1 (Annotated: **Slave id**)
- Function:** 01 Read Coils (0x) (Annotated: **Choose function code 01**)
- Address:** 1101 (Annotated: **Enter start address 1101 (PLC offset address)**)
- Quantity:** 4 (Annotated: **Number of registers**)
- Scan Rate:** 1000 [ms]
- View Rows:** 10 (Annotated: **Choose PLC address**)
- PLC Addresses (Base 1):** ☒ (Annotated: **Choose PLC address**)

The background shows a table with 10 rows. Row 4 is highlighted in blue, and its value is 1. The status bar at the bottom indicates the IP address [192.168.3.41]: 502.



The screenshot shows the Modbus Poll - Mbpoll1 application window after a successful read operation. The status bar at the top indicates the IP address [127.0.0.1]: 502. The main window displays the following information:

Tx = 22: Err = 0: ID = 1: F = 01: SR = 1000ms

	Alias	0x1100
1		1
2		0
3		0
4		1
5		

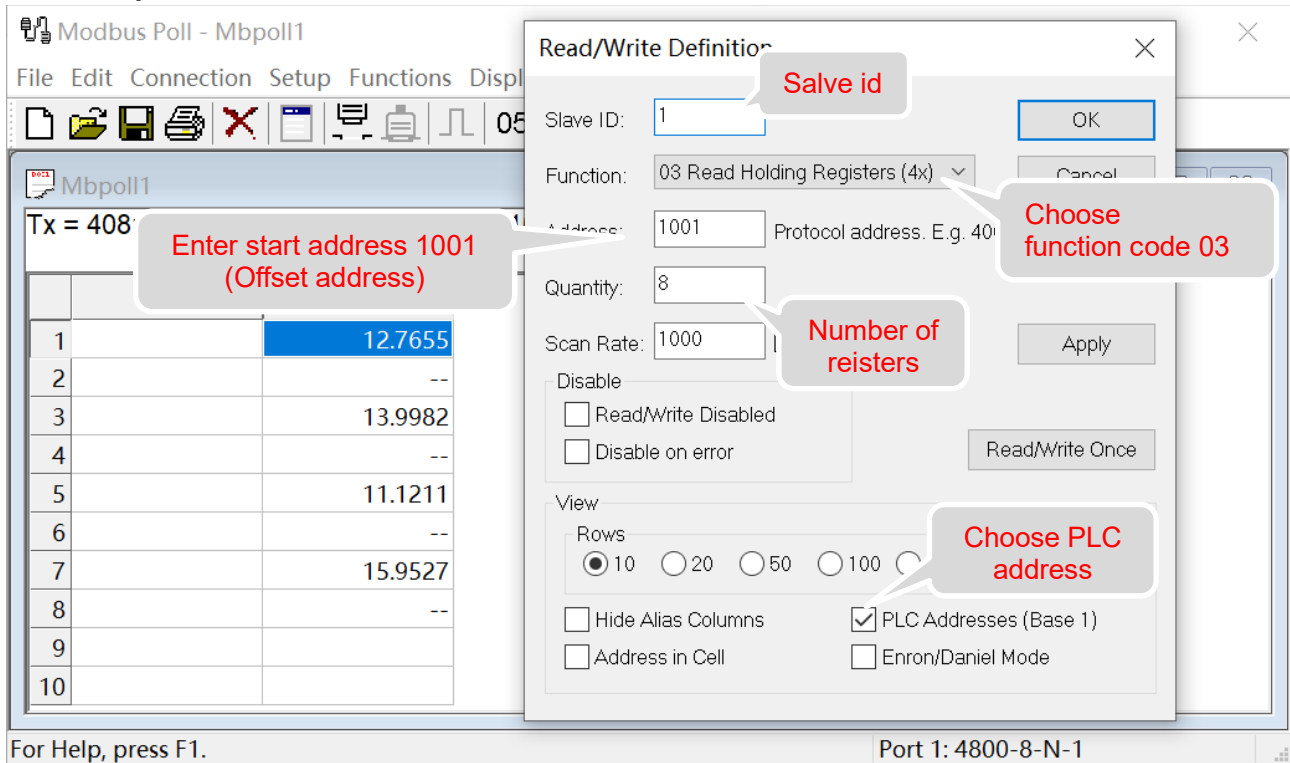
The 'Communication Traffic' window is open at the bottom, showing the following data:

Tx: 000036-05 CA 00 00 00 06 01 01 04 4C 00 04  
Rx: 000037-05 CA 00 00 00 04 01 01 01 09

The status bar at the bottom indicates the IP address [127.0.0.1]: 502.

### 3. Read analog input

For example, read 4 channels of Ai, slave id=1



The screenshot shows the Modbus Poll interface with the 'Read/Write Definition' dialog box open. The dialog box contains the following fields and options:

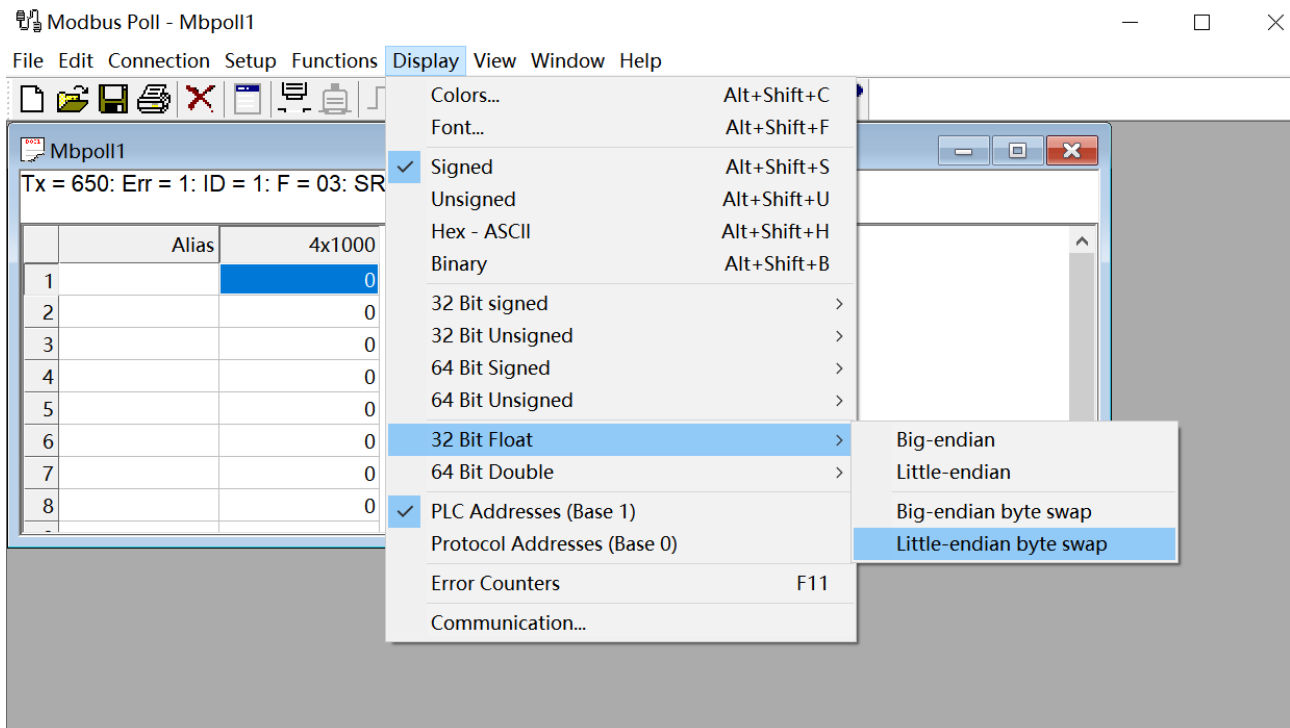
- Slave ID:** 1 (Annotated: **Slave id**)
- Function:** 03 Read Holding Registers (4x) (Annotated: **Choose function code 03**)
- Address:** 1001 (Annotated: **Enter start address 1001 (Offset address)**)
- Quantity:** 8 (Annotated: **Number of registers**)
- Scan Rate:** 1000
- Disable:**
  - ☐ Read/Write Disabled
  - ☐ Disable on error
- View:**
  - Rows:** 10 (selected), 20, 50, 100 (Annotated: **Choose PLC address**)
  - ☐ Hide Alias Columns
  - ☒ PLC Addresses (Base 1)
  - ☐ Address in Cell
  - ☐ Enron/Daniel Mode

The background shows the Modbus Poll main window with a table of data. The first row of the table is highlighted in blue and contains the value 12.7655.

1		12.7655
2		--
3		13.9982
4		--
5		11.1211
6		--
7		15.9527
8		--
9		
10		

For Help, press F1. Port 1: 4800-8-N-1

Choose 32 Bit Float



The screenshot shows the Modbus Poll main window with the 'Display' menu open. The menu options are:

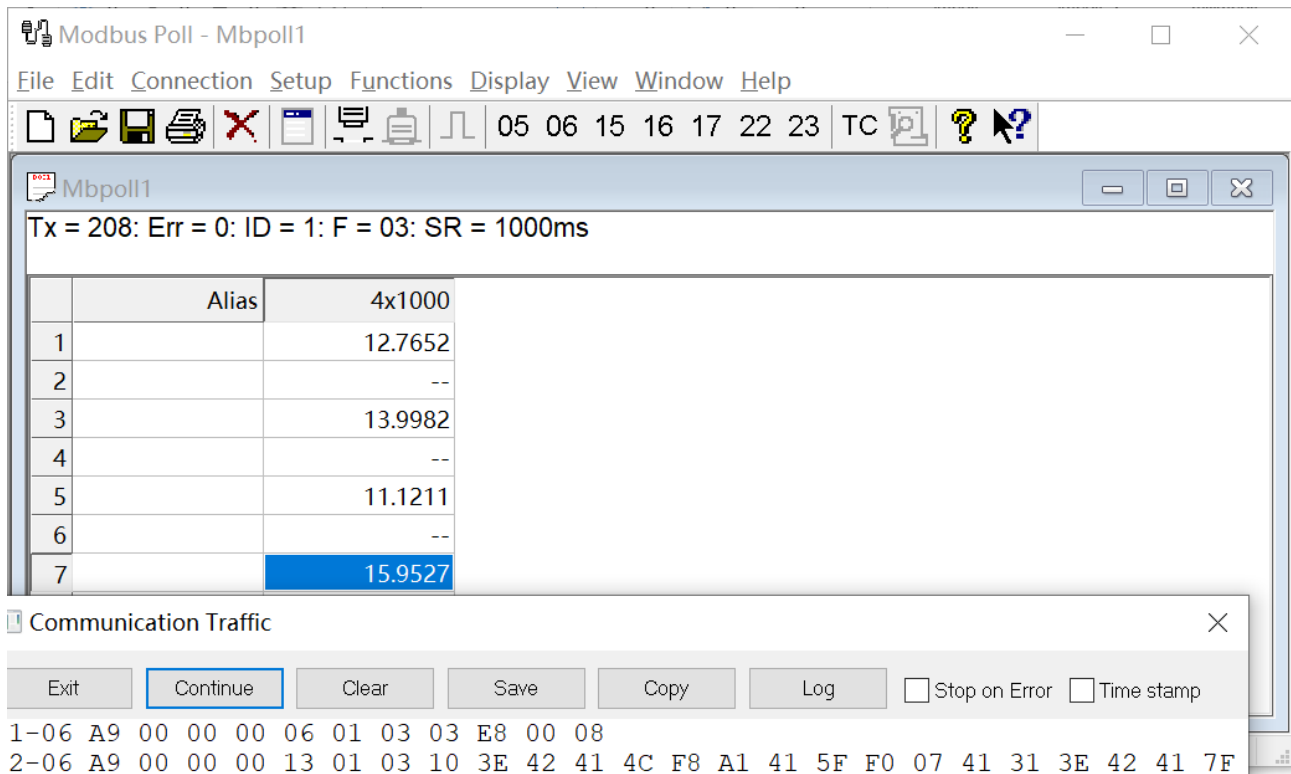
- Colors... (Alt+Shift+C)
- Font... (Alt+Shift+F)
- ☒ Signed (Alt+Shift+S)
- ☐ Unsigned (Alt+Shift+U)
- ☐ Hex - ASCII (Alt+Shift+H)
- ☐ Binary (Alt+Shift+B)
- ☐ 32 Bit signed >
- ☐ 32 Bit Unsigned >
- ☐ 64 Bit Signed >
- ☐ 64 Bit Unsigned >
- ☒ 32 Bit Float >
- ☐ 64 Bit Double >
- ☒ PLC Addresses (Base 1)
- ☐ Protocol Addresses (Base 0)
- Error Counters (F11)
- Communication...

The '32 Bit Float' option is selected, and its sub-menu is open, showing the following options:

- Big-endian
- Little-endian
- Big-endian byte swap
- Little-endian byte swap

The background shows the Modbus Poll main window with a table of data. The first row of the table is highlighted in blue and contains the value 0.

	Alias	4x1000
1		0
2		0
3		0
4		0
5		0
6		0
7		0
8		0



Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

Tx = 208: Err = 0: ID = 1: F = 03: SR = 1000ms

	Alias	4x1000
1		12.7652
2		--
3		13.9982
4		--
5		11.1211
6		--
7		15.9527

Communication Traffic

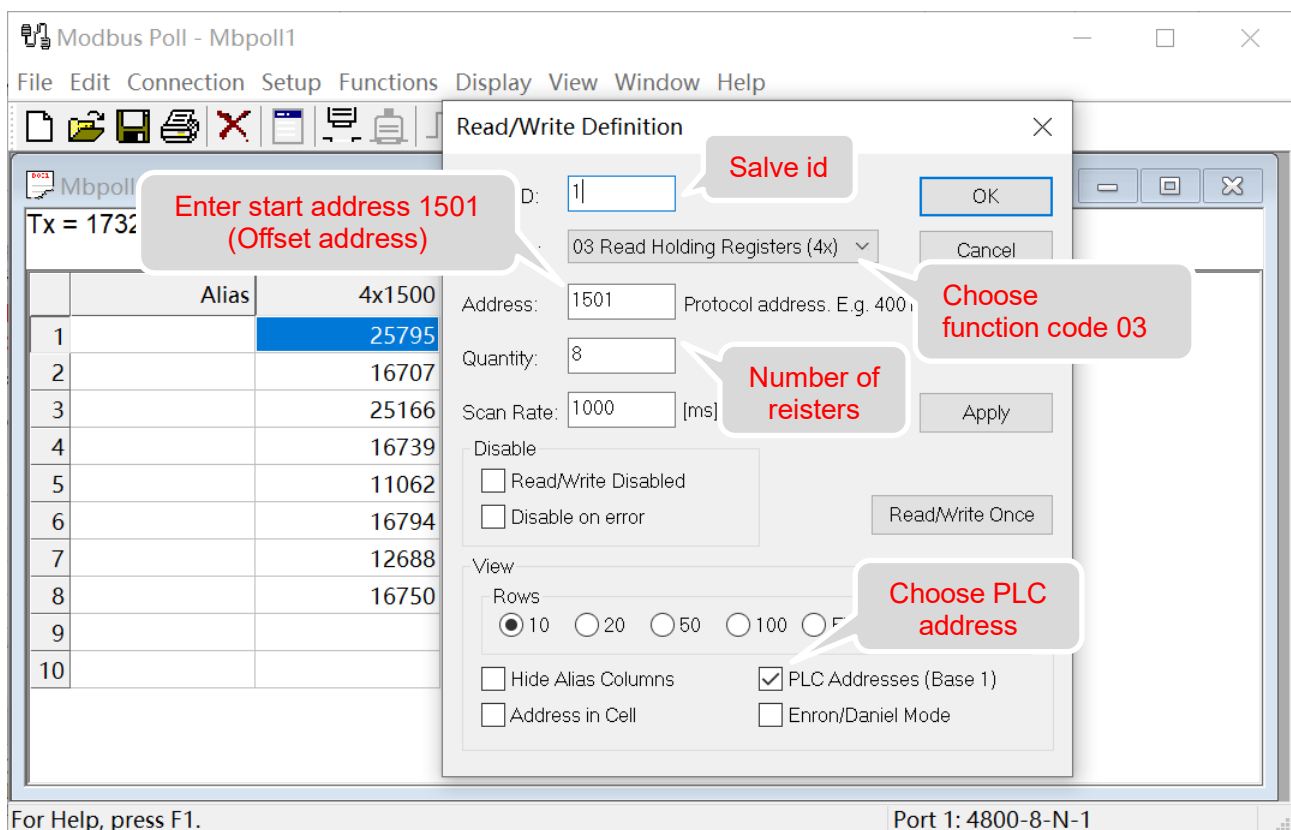
Exit Continue Clear Save Copy Log ☐ Stop on Error ☐ Time stamp

```

1-06 A9 00 00 00 06 01 03 03 E8 00 08
2-06 A9 00 00 00 13 01 03 10 3E 42 41 4C F8 A1 41 5F F0 07 41 31 3E 42 41 7F
  
```

#### 4. Read temperature input

For example, read 4 channels of Ti, slave id=1



Modbus Poll - Mbpoll1

File Edit Connection Setup Functions Display View Window Help

Tx = 1732

	Alias	4x1500
1		25795
2		16707
3		25166
4		16739
5		11062
6		16794
7		12688
8		16750
9		
10		

**Read/Write Definition**

Slave id: 1

Function: 03 Read Holding Registers (4x)

Address: 1501 Protocol address: E.g. 4001

Quantity: 8

Scan Rate: 1000 [ms]

Disable: ☐ Read/Write Disabled ☐ Disable on error

View: Rows ☒ 10 ☐ 20 ☐ 50 ☐ 100 ☐ 200

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

Buttons: OK, Cancel, Apply, Read/Write Once

Annotations:

- Enter start address 1501 (Offset address)
- Salve id
- Choose function code 03
- Number of registers
- Choose PLC address

For Help, press F1. Port 1: 4800-8-N-1

## Choose 32 Bit Float

