

MODBUS ASCII

Supported Series: MODBUS ASCII CONTROLLER Website: <u>http://www.modbus.org</u>

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	MODBUS ASCII		
PLC I/F	RS485	RS232/RS485	
Baud rate	9600	9600/19200/38400/	
		57600/115200	
Data bits	8	7,8	
Parity	Even	Even, Odd, None	
Stop bits	1	1,2	
PLC sta. no.	1	0-255	

Online simulator	YES	Broadcast command	YES
Extend address mode	YES		

PLC Setting:

Communication mode	Modbus ASCII protocol

Device Address:

Bit/Word	Device type	Format	Range	Memo
В	1x	DDDDD	1 ~ 65535	Input bit (read only)
В	0x	DDDDD	1 ~ 65535	Output bit
В	3x_Bit	DDDDDdd	100 ~ 6553515	Input Register bit (read only)
В	4x_Bit	DDDDDdd	100 ~ 6553515	Output Register bit
W	3x	DDDDD	1 ~ 65535	Input Register (read only)
W	4x	DDDDD	1 ~ 65535	Output Register
W	6x	DDDDD	1 ~ 65535	

Note: EBPro V6.03.02 or later supports 64 bits data type, but please note that the address limit range is 48 bits in maximum.



Modbus RTU function code:

- 0x 0x01 Read coil
- 1x 0x02 Read discrete input
- 3x 0x04 Read input register
- 4x 0x03 Read holding register
- 3xbit is equivalent to 3x
- 4xbit is equivalent to 4x

0x05 write single coil N/A for write operation N/A for write operation 0x10 write multiple registers

Wiring Diagram:

Diagram 1

RS-232

The serial port pin assignments may vary between HMI models, please click the following link for more information.

НМІ		PLC
Link		RS232
Rx	- 	TXD
Tx	←	RXD
GND	◆	GND
		RTS
		CTS



Diagram 2

RS-485 4W

The serial port pin assignments may vary between HMI models, please click the following link for more information.

НМІ		PLC
Link		RS485 4W
Rx-	◆	Tx-
RX+	<>	Tx+
Tx-	<>	Rx-
Tx+	◆	Rx+
GND	▲	GND



Diagram 3

RS-485 2W

The serial port pin assignments may vary between HMI models, please click the following link for more information.

НМІ		PLC
Link		RS485 2W
Data-	←	D-
Data+	<>	D+
GND	<>	GND