

Modbus Poll Software

Modbus Poll is a simple modbus communications tool developed by Witte Communications http://www.modbustools.com/modbus_poll.asp that can be used to read and write registers of modbus devices.

The following is a brief set of instructions for communicating with a device.

The first time Modbus Poll is used, it should be set to base 0 addressing.

This is done by selecting "Protocol Addressing (Base 0) " from the Display menu:

File Connect	ion Setup	Functions	Display	View	Window	Help			
🗅 🚅 日					j ✔ Signed				
Doctor and the second			Unsigned						
Mbpoll1			Hex						
Tx = 115	4: Err =	: 1021:	Binary	/					
No conne	ction		Long						
00101 =	240	00124	Long	Inverse					
00102 =	1000	00125	Float						
00103 =	0	00126	Float	Inverse	e				
00104 =	0	00127	Doub	e					
00105 =	0	00128	Doubl	- e Inver	'se				
00106 =	1	00129		0 11110					
00107 =	3	00130	PLC A	ddress	es (Base 1)			
00108 =	19	00131	🗸 Proto	col Add	resses (Ba	ise 0)			
00109 =	500	00132				L.			
00110 =	500	00133	Comm	nunicati	on				

the Setup menu:

File Connection	Setup	Functions	Display	View	V V	Vind	ow	Help
🗅 🖻 🖥 🚭	Poll I Opti	Definition	F2	05	06	15	16	22
Mbpoll1								
Tx = 1154: No connecti	Log. Logo	ging Off		55:	F	=	03:	SR
00101 = 00102 = 1 00103 =		et Counters as Expfault	F12	10 0 20				

At this point, the connection to the device needs to be established.

Select "Connect..." from the Connection menu:

File	Connection Setup	Functions	Display	View	Window	Help
D	Connect F3	· 日.	<u>а</u> л	. 05 00	6 15 10	6 22
	Disconnect VF4					
Tx No	Auto Connect Quick Connect F5	21:	ID =	255: H	7 = 03	: SR



Unless the device has specifically been setup for 9600 baud, the default connections settings should be as follows:

onnection		3
Port 1	Mode © RTU © ASCII	ОК
19200 Baud 💌 8 Data bits 💌	Response timeout	Cancel
None Parity 💌 1 Stop Bit 💌	Flow control	
Remote Server	Port	
0.0.0.0	502	

After the connection is established, it is necessary to setup the poll definitions.

This is done by selecting "Poll Definition..." from the Setup menu:

File Connection	Setup Functions Display	View Window Help
	Poll Definition F2	05 06 15 16 22
Mbpoll1 Tx = 1154: No connecti	Log Logging Off	55: F = 03: SR
00101 = 00102 = 1	Reset Counters F12 Use as Default	10 0

Within the Poll Definitions dialog window, there are several parameters that need to be set.

Slave ID is the modbus address of the device being read or written. (255 is the generic address to which all devices will respond.)

Function should be set as 03 HOLDING REGISTER. *Address* is the starting address of the registers to be read.

Length is the number of registers to be read. *Scan Rate* is the frequency with which the device will be polled.

oll Definit	ion	
Slave ID:	255	OK
Function:	03 HOLDING REGISTER 💌	Cancel
Address:	101	á – e hu
Length:	40	Apply
Scan Rate:	1000 ms	
🔽 Auto Re	ead Enable	Read Once



Once the Poll Definitions have been setup and applied, the main window will show a list of each register address and its corresponding value.

الملع				and the second	- Mbgo		
	w Window Help D5 15 16 22 23 101 😵 📢						
1001 -	00 10 10 LE LA 101 8 10	11 02 00	- 94 T	101123	1.1.1	-	distant and
_02					_	2000 J.	Mbps
	: F = 03: SE = 1000ms	• 255: F	ID .	= 130Z:	Err	1441:	X = 1
		10		00124	203	-	0101
		0		00125	0		0102
		20		00125	0		0102
		2		00127	53		0104
		1		00128	0		0105
		ò		00129	0		0105
		0		00130	0		0107
		50		00131	31		0108
		15		00132	500		0109
		0		00133	500		0110
		0		00134	0		0111
		20		00135	100		0112
		19		00136	0		0113
		4		00137	z		0114
		0		00138	5		0115
		0		00139	0		0116
		0		00140	0		0117
		-075.04			1		0118
					10		0119
					10		0120
					0	-	0121
					з		0122
					10	-	0123

In order to write a value to a specific register, select "06 Write Single Register..." from the Functions menu:

File Connection Setup	Functions	Display	View	Window	Help
D 🗳 🖬 🎒 🗙	Read Or	nce		F6	22
	05: Writ	e Single C	Ioil	F7	
Mbpoll1	06: Writ	e Single F	legister	. F8	
Tx = 1162: Err =	15: Writ	e Coils	3	1 F9	SR
Timeout error	16: Writ	e Registe	rs	F10	
00101 = 240	22: Mas	k Write R	egister.		
00102 = 1000		d/Write R	5 T 2 3 6 1		
00103 = 0					-
00104 = 0	Test Ce	nter			

Slave ID is the modbus address of the device.

Address is the address of the register that will be written.

Value is the value being written.

rite Single	Register	×
Slave ID:	255	Send
Address:	0	Cancel
Value:	Ē	
	ion rite single register rite multiple registers	