Schneider PowerLogic Modbus RTU

Supported Series : Schneider PowerLogic Modbus RTU
Website : https://www.schneider-electric.com/ww/en/

HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	Schneider PowerLogic Modbus RTU		
PLC I/F	RS485	RS232/RS485	
Baud rate	9600	9600~115200	
Data bits	8	7,8	
Parity	Even	Even, Odd, None	
Stop bits	1	1,2	
PLC sta. no.	1	0-255	

*Support communications between HMI and PLC in pass-through mode
*Set LW-9903 to 2 to enhance the speed of download/upload PLC program in pass-through mode

Online simulator	YES	**Broadcast command**	YES
Extend address mode	YES		

Device Address:

Bit/Word	Device type	Format	Range	Memo
B	0x	DDDDD	1 ~ 65535	Output bit
B	1x	DDDDD	1 ~ 65535	Input bit (read only)
B	3x_Bit	DDDDDdd	100 ~ 6553515	Input Register bit (read only)
B	4x_Bit	DDDDDdd	100 ~ 6553515	Output Register bit
B	0x_multi_coils	DDDDD	1 ~ 65535	Write multiple coils
W	3x	DDDDD	1 ~ 65535	Input Register (read only)
W	4x	DDDDD	1 ~ 65535	Output Register
DW	5x	DDDDD	1 ~ 65535	4x double word swap
W	6x	DDDDD	1 ~ 65535	4x single word write
W	UMod10_4_ASCII	DDDDDDD	100 ~ 6553500	Read 64 bits unsigned data
W	UMod10_3_ASCII	DDDDDDD	100 ~ 6553500	Read 48 bits unsigned data
W	Mod10_2	DDDDD	1 ~ 65535	Read 32 bits data
W	UINT64_ASCII	DDDDDDD	100 ~ 6553500	Read 64 bits unsigned data

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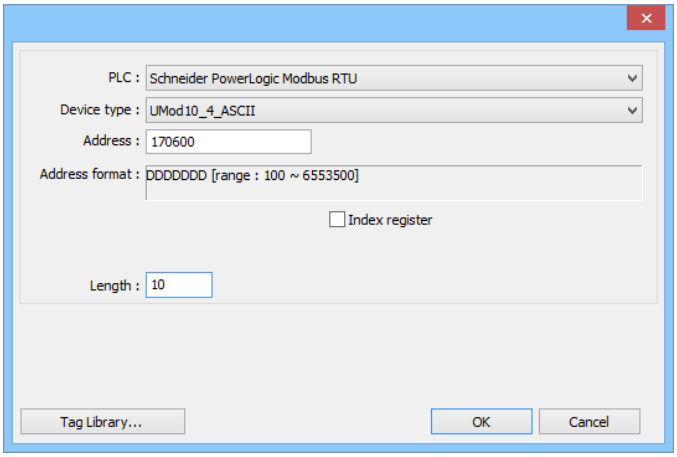
Bit/Word	Device type	Format	Range	Memo
W	Mod10_4_ASCII	DDDDDDD	100 ~ 6553500	Read 64 bits signed data
W	Mod10_3_ASCII	DDDDDDD	100 ~ 6553500	Read 48 bits signed data
W	INT64_ASCII	DDDDDDD	100 ~ 6553500	Read 64 bits signed data

Use the driver “Schneider PowerLogic Modbus RTU”, you should see that it has extra data types in addition to Modbus ones. Because the 64-bit objects are not natively supported by nuemric objects yet, we have to use ASCII objects to display them.

You can treat Mod10_2 just as any other normal address because it’s also 32 bit data. However, when you use ASCII types, please beware of its special addressing method, and the length of memory allocation.



Addressing method:
it is necessary to add a suffix of 00. For example, to read register 1716 [Energy, Real Total] in PM800, you should address it with 171600.

Length of memory allocation:
When using ASCII, it is necessary to specify the length, that is, the number of word memory. Each WORD holds two characters. So if , as the picture above, I’ve specified the length of 10, I can have maximum of 20 characters for this object (including the negative sign). Please adjust this parameter according to the expected data.

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Wiring Diagram:

Diagram 1

RS-232

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

HMI		PLC
Link		RS232 terminal
Rx	↔	TXD
Tx	↔	RXD
GND	↔	GND

Diagram 2

RS-485 2W

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

HMI		PLC
Link		RS485 2W terminal
Data-	↔	D-
Data+	↔	D+
GND	↔	GND

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Diagram 3

RS-485 4W

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

HMI		PLC
Link		RS485 4W terminal
Rx-	↔	TX-
RX+	↔	TX+
Tx-	↔	RX-
Tx+	↔	RX+
GND	↔	GND

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