

Guida alla connessione e settaggio HMI/PLC



Comunicazione tra HMI Kite e Schneider-M238

Preface

This technote is to explicate how to connect Schneider-M238 PLC with PanelMaster HMI as well as the associated communication settings.

This technote goes for Schneider-M2XX and ATV31 series. Take Schneider-M238 as example.



M238 Controller Settings:

1. M238 Communication Ports:



M238 has two communication ports SL1 and SL2, which are RJ45 terminal. It's suggested to connect HMI with SL1 port to avoid complicated setup process.

2. **M238 pin:**

SL1			SL2
N°	RS 232	RS 485	RS 485
1	RXD	N.C.	N.C.
2	TXD	N.C.	N.C.
3	RTS	N.C.	N.C.
4	N.C.	D1 (A +)	D1 (A +)
5	N.C.	D0 (B -)	D0 (B -)
6	CTS	N.C.	N.C.
7	N.C.	N.C.	+ 5 V
8	0 V com.	0 V com.	0 V com.

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8765	4321
RJ45	

3. PLC Software Settings

1.1 Transmission/Physical Medium Settings

Intitled2		
🖻 💼 MyController (TM238LFDC24DT)		
📮 🗐 PLC Logic	Configuration Status Inform	ation
🖹 🔘 Application	Serial line	
🧭 GVL 🎁 Library Manager	Baud rate:	19200 💌
😑 🎆 Task Configuration	Parity:	Even
MAST	Data bits:	8
	Stop bits:	1 👻
HSC (HSC)		,
	Physical Medium	
😑 🍐 Serial Line 1	• R5 485	No. Polarisation Resistor
🚹 Modbus_Manager (Modbus_Manager)		
📮 👌 Serial Line 2	C RS 232	
🚽 🔟 SoMachine_Network_Manager (SoMachine-Network_		
CAN		

Note: The default parameters setting are 19200, 8, E, 1, node: 1 respectively.

1.2 Modbus Communication Settings

= 👌 Untitled2	Configuration Status Infor	rmation	
🖃 🔟 MyController (TM238LFDC24DT)	Modbus		
📮 🚉 PLC Logic			MODDIIC
🖻 🔘 Application	Transmission Mode:	• RTU C ASCIL	MUDDO2
- 🎒 GVL			
📲 🎁 Library Manager	Addressing:	Slave Address [1247]:	1
🖹 🎆 Task Configuration	Time between Frames (n	ns): 10	
	- Seviel Line Settings	,	
	Senai Line Settings		
HSC (HSC)	Baud Rate:	19200	
PTO_PWM (PTO_PWM)	Parity	Even	
🖶 🍐 Serial Line 1	r uncy r	Eron .	
Modbus_Manager (Modbus_Manager)	Data Bits:	8	
😑 🤰 Serial Line 2	Stop Bits:	1	
SoMachine_Network_Manager (SoMachine-Network_			
- 2 CAN	Physical Medium:	R5485	
	·		

Transmission Mode: RTU Addressing: slave Address: 1 Time between Frames (ms): 10ms

4. Connection Illustration : (HMI and M238)

PV/PT COM 1 9-PIN D-Sub Male

M238_SL1_RJ45

1	RS485+	 4	D1(A+)
6	RS485 -	 5	D0(B)

PM Designer Settings:

1 Link Settings:

Link Properties	Link Properties					
General Paramet	er					
Link Number:	1					
Link Name:	連線1					
Link Type:	Direct Link (COM)		*			
Device/Server:	Schneider Electric	ATV31 Inverter (RTU)	*			
Link Port:	COM1(連線1)	🔽 🗌 Sub-links				

2 Parameters Settings: The parameters settings need to be identical with the ones in PLC.

Link Properties				
General Parameter				
- Transmission	Others			
Baud Rate: 19200 🗸	Panel Address: 1			
Data Bits: 8 🗸	PLC Address: 1			
Parity: Even 🗸	Timeout Time: 0 😂 (x 0.1 Sec.)			
Stop Bits: 1 🗸	Command Delay: 0 📚 (x 0.1 Sec.)			
	Retry Count: 0			

- Note 1: The max Baud rate of M238 is $115,200 \circ$
- Note 2: The default Baud rate of M238 is 19200, 8, E, 1, node: 1. It's suggested to keep Baud rate in 19200.

The following illustration are the word devices for HMI:

Word Device (ATV31 Inverter (RTU))				
Word Device Wn Pn DWn DPn n n	Address Range n: 0~65535 n: 0~65535 n: 0~65534; n=2q n: 0~65534; n=2q n: 30001~39999 n: 40001~49999	Size Word 32 bits 32 bits Word Word	Commeni Byte orde Word ord Word ord	
<			>	
	Close			

3 The following illustration are the bit devices for HMI:

Bit Device (ATV31 Inverter (RTU))					
	Bit Device Bn n n	Address Range n: 0~65535 n: 1~9999 n: 10001~19999	Block Addr Com Any address Any address Any address		
	<	Ш	>		
	Close				