E2 setup with Schneider PM210 MODBUS device for 527-0397

This document will guide you through setting up and commissioning the Schneider PM210 Network Analyser with MODBUS RTU Interface in the E2 controller.

Note that open MODBUS description files require E2 firmware version 3.01F01 or higher.

Step 1: Upload the description file to the E2 controller

- 1. From UltraSite, connect to your E2 controller.
- 2. Right-click on the E2 icon and select Description File Upload.
- 3. Browse to the location of the description file and click Upload.
- 4. Once upload is complete, reboot the E2 controller.

E2 Description File Upload To delete a life, for select the list. E220000 dec FILE - Click Bowne to select the file to ryoload Bowne Upload Premove Cloce	Ĭ]



Step 2: Activate the license of the device

- 1. From the E2 front panel (or via Terminal Mode), press (Ment), ⁸/₇ (System Configuration) and ⁹/₉ (Licensing).
- 2. Press F1 (ADD FEATURE) and enter the license key.

ADUISORY SUM Fails License License Notices NETHORK OVER HODBUS-1
NETWORK OVER Hodbus-1
B THIS CONTROL B Hodel: BX-4 D Unit: 1 D 100 100
8 F/W Rev: 4.
EE. CONC
5 5 5 5 5

Step 3: Add the device in the E2 controller

- Press (New), ^{*}7 (System Configuration), ^{*}7 (Network Setup),
 ^{*}2 (Connected I/O Boards & Controllers).
- 2. Press **F2** (*NEXT TAB*) to shift over to the C4: *Third Party* tab. The name of the device will display in the list. Highlight the device name and enter the number of devices and press **(**) to save changes.

Step 4: Assign a MODBUS port

- 1. Press (System Configuration), 2 (Remote Communications), 3 (TCP/IP Setup).
- 2. Select the COM Port the device is connected to, press **F4** (*LOOK UP*) and select the appropriate MODBUS selection.

C1: General C2: Eng Units C3: Scrial C4: TCP/IP C5: Peer Netwrk ADUISORY SUMMARY C6: C7: System C8: BACAREt C9: C0: HORE ADUISORY SUMMARY General Setup: GENERAL SERU General Setup: GENERAL SERU C0: HORE ADUISORY SUMMARY Serial Value C0H1 Connection : Serial On Notices 2 C0H1 Connection : IONet COM2 Baud : 9600 baud Metwork Metwork OUERVIEW C0H2 Baud : 9600 baud COM4 Connection : Not Used Metwork Metwork OUERVIEW C0H4 Connection : Not Used COM6 Connection : Not Used Metwork Used Metwork Used Metwork Used C0H6 Connection : Not Used Metwork Used Metwork Used Metwork Used Model: BX-400 Unit: 1 FV: 192.168.1.11 FV: Nev: 4.03676 Frev: 4.03676 Frev: 4.04676 Frev: 4.04676	11-1 Use	2-12 🔹 🦪 💷 Ctrl-X to S) elect CX	Tabs		BX-400 (Seti	Jnit 1 JP		NAME	S FULL		23:41:22
Serial Value COM1 Connection : Serial COM1 Baud : 115.2 Kbaud COM2 Connection : IONet COM2 Connection : No Hoden COM3 Connection : Not Used COM6 Connection : Not Used COM6 Connection : Not Used THIS CONTROLLER Model: BX-400 O Unit: 1 IP: 192.168.1.11 F/W Rev: A.935P1	C1: C6:	General	C2: Eng C7: Sys	g Units stem Genera:	C3: Seria C8: BACne L Setup: GE	L C4 L C9 Ineral Ser	: TCP/IP : RV	C5: C0:	Peer MORE	Netwrk	ADVISORY Fails Alarms	SUMMARY 0 0
THIS CONTROLLER Hodel: 8X-400 0 Unit: 1 IP: 192.168.1.11 F/W Rev: 4.03501		Serial COM1 Connet COM1 Baud COM2 Baud COM2 Baud COM3 Connet COM4 Connet	ction ction ction ction ction	Value : Serial : 115.2 : IONet : 9600 b: : No Modi : No Modi : Not Use	Cbaud 200 20 2d						NETWORK (Nodbus-1	UUERUIEW
											THIS CON Model: N Unit: 1 IP: 192 F/W Rev	(ROLLER 3X-400 0 .168.1.11 : 4.03F01

Figure 3 - assign COM port

11-1	12 🔹 😚 📖		B) 01	<-400 Unit 1 PTION LOOKUP	MAM	ES FULL		23:51:47
<u>C1:</u> C6:	eneral C2: C7 Serial 2011 Connectio 2012 Connectio 2012 Connectio 2018 Connectio 2014 Connectio	Eng Units Systen Op Descrip Not Use IONet ISD1.0 Lenn.0 Lenn.0 HOBBUS HOBBUS HOBBUS HOBBUS HOBBUS HOBBUS	CB: Serial CB: BACnet tion List Selec Select: tion d 1 2 3 5 4 KSTP-1 HSTP-2 HSTP-3	C4: TCP/IP C9: ction Select 0 13 16 19 22 23 24 33 34 35 36	C5: Peer	Netwrk	ADUISORY Fails Alarns Notices NETWORK (HODBUS- HODBUS- HODBUS- I Hodel: 1 Unit: 1 IP: 192 F/V Rev.	SUMMARY 0 0 2 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0
Use	Jp-Down Arrow	keys or fun	ction keys to s	select entry. Pr	ess BACK.			

Figure 4 - MODBUS selection

11-12-12 🗕 🥝 🛄		B) 01	K-400 Unit 1 PTION LOOKUP	NAMES FUL	23:47:5
C1: General C6: Serial C0H1 Connet C0H1 Baud C0H2 Connet C0H3 Connet C0H4 Connet C0H4 Connet C0H6 Connet C0H6 Connet C0H6 Connet C0H6 Conte C0H6 Stop F	C2: Eng Units C7: System tio tio tio tio 2400 bat 4800 bat 9600 bat 19.2 Kb 38.4 Kb 57.6 Kb 115.2 Kb	103: Serial 08: BACnet cion List Sele Select: cion id id	C4: TCP/IP C9: ction Select 5 1 8 2 3 4 6 9 7 7	C5: Peer Netur	k ADUISORY SUMMARY Fails 0 Alarms 0 Notices 2 NETWORK OUERUIEW MODBUS-1 THIS CONTROLLER Model: BX-400 Unit: 1 IP: 192.168.1.1' F/V Rev: 4.0360'
Use Up-Down Arr	ow keys or func	tion keys to :	select entry. Pre	F4: END	F5: CANCEL

Figure 5 - configure Baud rate

3. Set the data size, parity and stop bits. Press **F4** (*LOOK UP*) to select the appropriate values. The baud rate and other communication parameters must also be configured on the MODBUS device.



For any further information please refer to the document: PM210 Reference Manual - 63230-510-205.pdf

Step 5: Commission the device to the E2 controller

- 1. Press (Network Setup), ⁴/₇ (System Configuration), ⁴/₇ (Network Setup), ¹/₄ (Network Summary).
- 2. On the *Network Summary* screen, highlight the device name, press **F4** (*COMMISSION*). Select the preferred MODBUS port where you will assign the device, then assign the MODBUS address of the device.

17-03-13 🔍 🦪		BX-400 U Network S	nit 1 ummary	MAMES FULL	0:24:54
Name LABTESTER PH210001	Type 8X400-B1dg PH210	Nature, Oddesce Select Network 1. MODBUS-2 2. WODBUS-1	Rev 1 4.03F01 0 0.00	Status This Controller No Port	ADUISORY SUMMARY Fails 0 Alarms 0 Notices 1 NETWORK QUERUIEW MODBUS-1 0 THIS CONTROLLER Model: BX-A00 0f Unit: 1 IP: 192.168.1.111 F/W Reu: 4.03F01
Press menu n	umber or scroll	to selection	ļ		F5: CANCEL

Figure 6 - select physical MODBUS route

17-03-13 🛛 🦪 💷		BX-400 Unit Network Summ	: 1 nary	NAMES FULL	0:25:4
Name	Туре Г	Notwork Addroce	Rev State	ADVISOR IS Fails	Y SUMMARY Ø
LABTESTER PM210001	8X400-81dg PH210	HODBUS-1 Devices 1. (Unused) 2. (Unused) 3. (Unused) 4. (Unused) 5. (Unused) 6. (Unused) 7. (Unused) 8. (Unused) 9. (Unused) 11. (Unused) 12. (Unused) 13. (Unused) 14. (Unused) 15. (Unused) 16. (Unused) 17. (Unused) 18. (Unused)	4.03F01 This 6	Controller Notices t NETWORK NODDUS THIS CON Nodel: Unit: IP: 192 E/U Par	5 1 OUERUIEW -1 0 HTROLLER BX-400 0 2.168.1.11
Press menu m	umber or scroll	17. (Unused) 18. (Unused) ▼ to selection		Unit: 192 IP: 192 F/W Rev	2.168.1.1 2.4.03F0 CONCEL

Figure 7 - assign MODBUS address

17-03-13 •		BX-40 Networ	0 Unit 1 k Summary	NAMES FULL	0:26:1
Name	Туре	Unkno Notwork Addres	wn Device 01 Rev	Status	ADUISORY SUMMARY Fails 0
LABTESTER PM210001	BX400-Bldg PM210		4.03F01 0.00	This Controller No Port	Notices 1
					NETWORK OVERVIEW Modbus-1 🔶
	Setting Phys	sical Address for:	Unknown Devi	ce 01	
	Specify Phys	sical Address Of Co	ntroller		
	Addı	ress: 1			
					THIS CONTROLLER Model: BX-400 0 Unit: 1 IP: 192.168.1.11 F/W Rev: 4.03F01
Enter value	and Press ENTER t	o Set Address			

Figure 8 - choose physical address of controller

17-03-13 🍨 🥝			BX-400 U Network S	nit 1 ummary	NAMES FULL		0:26:5
Name	Туре	Notuneb	Unknown	Device 01 Rev	Status	ADVISORY Fails	SUMMARY Ø
LABTESTER PM210001	BX400-Bldg PM210			4.03F01 0.00	This Controller No Port	Notices	1 1
						NETWORK O Modbus-1	VERVIEW
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	Specify Phys	sical Addres	s Of Contr	oller			
	Add	ress: 1					
	WODRO2 DEAL	ce Hooress 1	s sec				
						Model: B Unit: 1 IP: 192. F/W Rev:	RULLER X-400 0 168.1.11 4.03F01
						F5: C	ANCEL

Figure 9 - set commissioning address

3. After assigning the MODBUS address and verifying that the device wired properly, the device should come online on E2 *Network Summary* screen.

NOTE: Make sure the polarity is reversed on the E2.

17-03-13 • 🦪		BX-400 U Network S	Jnit 1 Summary	NAMES FULL	0:27:3
Name	Туре	Network Address	Rev	Status	ADVISORY SUMMARY Fails Ø
LABTESTER PM210001	BX400-Bldg PM210	Ethernet: MODBUS-1:	1 4.03F01 1 0.00	This Controller Online	Notices 1
					NETWORK OVERVIEW Modbus-1 •
					THIS CONTROLLER Model: BX-400 0 Unit: 1 IP: 192.168.1.11 F/W Rev: 4.03F01
		2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 - 2005 -	2000000		
F1: DELETE	RCRD F2: S	TATUS F3: NET	STATUS	F4: COMMISSION	F5: SETUP

Figure 10 - device should appear online



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