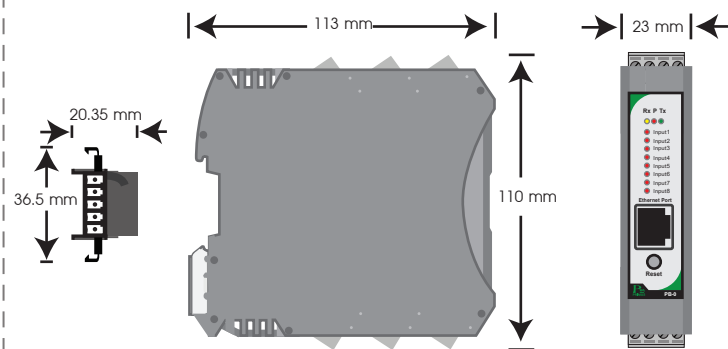




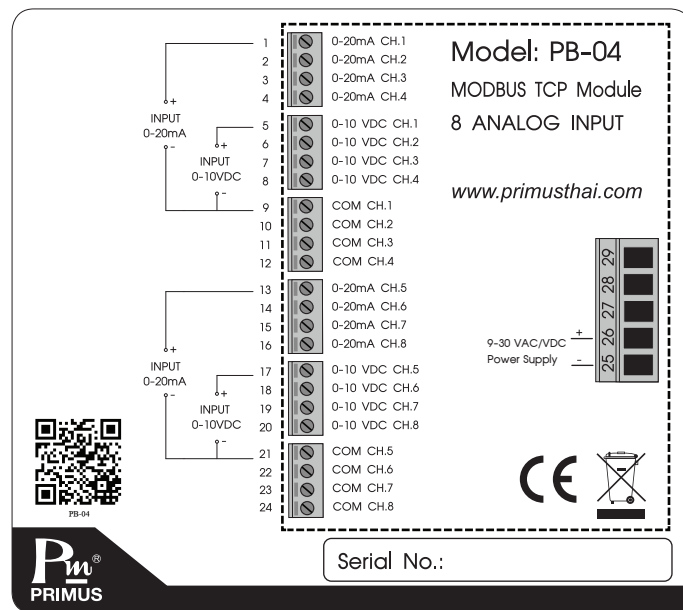
DIMENSION



OPERATION DISPLAY

Symbol	Input Type	Reading Range		
		Display Input = 0	Display Input = 1	Display Input = 2
0	0-20 mA.	0 to 20000	0 to 65535	Zero to Span
1	4 - 20 mA.	4000 to 20000	0 to 65535	Zero to Span
2	0-1 VDC	0 to 10000	0 to 65535	Zero to Span
3	± 1 VDC	-10000 to 10000	0 to 65535	Zero to Span
4	0-5 VDC	0 to 50000	0 to 65535	Zero to Span
5	± 5 VDC	-5000 to 5000	0 to 65535	Zero to Span
6	0-10 VDC	0 to 10000	0 to 65535	Zero to Span
7	± 10 VDC	-10000 to 10000	0 to 65535	Zero to Span

WIRING DIAGRAM



DESCRIPTION

- is the device that use with MODBUS TCP Protocol.
- 8 Analog Input 0-20 mA, 4-20 mA/0-10VCD , 16 bits, Isolated
- Able to set the operation via Web Browser.
- LED shows Input status.

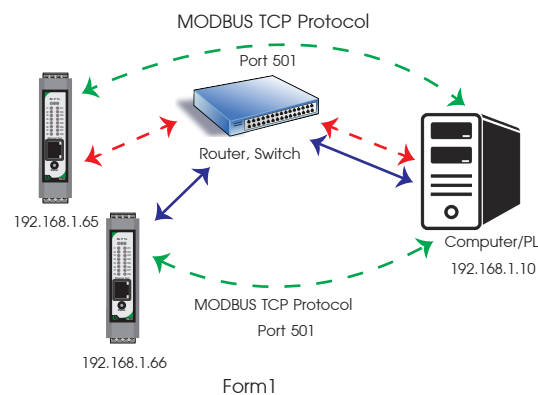
OPERATION

PB-04 is receiver device 8 Analog Input can choose both 0-20 mA and 0-10 VDC in one. Resolution 16 bits find high resolution to convert value into system and send Data to Master Device such as PC or PLC to operate Function that require and relate to Analog Output Module.

PB-04 can program for setting Ethernet IP by PC and Configuration via Web Server.

Communication

MODBUS TCP Protocol Communication



is communication MODBUS TCP Protocol between Computer with MODBUS TCP I/O Module device. Computer can write or read data of MODBUS TCP I/O Module by Communication Port is 501.

TECHNICAL SPECIFICATION

Power Supply		9-30 VAC/VDC	
Power Consumption		2 VA	
Display		LED	
Input	Inputs Points	8	
	Input Current/mV	0-20mA / 0-10V	
	Input Type	Range	Resolution
	0	0 - 20 mA	1 uA
	1	4 - 20 mA	1 uA
	2	0 - 1 VDC	0.1 mV
	3	± 1 VDC	0.1 mV
	4	0 - 5 VDC	0.1 mV
	5	± 5 VDC	1 mV
	6	0 - 10 VDC	1 mV
	7	± 10 VDC	1 mV
	Accuracy	1% of Full Scale	
	Display Input		
	0	แสดงค่าตาม Input Type	
	1	แสดงค่า 0-65535 16 Bits	
	2	Scale zero span	
Communication	Protocol	Modbus TCP/IP	
	Ethernet	10/100Mbps/s	
Ambient Operation	Temperature	-10 °C to 60 °C	
	Humidity	<85% RH Non-Condensing	
Ambient Storage	Temperature	-20 °C to 80 °C	
	Humidity	<85% RH Non-Condensing	
Protection Degree		IP20	
Installation		DIN RAIL	
Material		ABS-V0	
Size		23 x 113 x 110 mm.	
Weight		180 g.	

DESCRIPTION

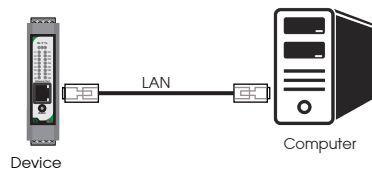
PB -

04

SETTING

1. Connect Computer with device

1.1 Connect LAN to device and Computer.



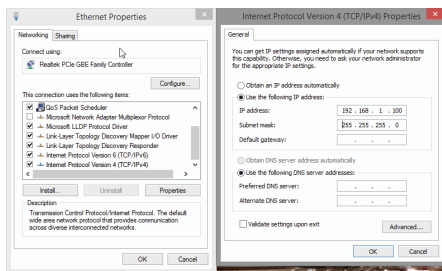
1.2 Device from factory IP Address is 192.168.1.10

User Name : admin

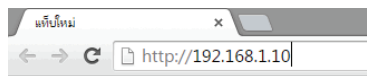
Password : 1234

1.3 In case user does not know IP Address, User Name or Password. Press Reset for 4 seconds until all LED will turn to red light.

2. Set IP Address of Computer is 192.168.1.100 follow as below



* Do not IP Address is 192.168.1.10 or same as device
because it will make IP Address error*

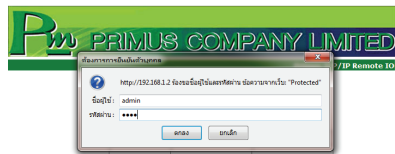
3. Open Web Browser and fill address <http://192.168.1.10> page Homepage will show up.

Overview	8 ANALOG INPUT MODULE
Remote Server	
Configuration	Module Name : PM_8ANALOG_INPUT

Channel Number	Channel Name	Input Type	Display Type	Value
Channel 1	Input_1	0-20 mA	0to20000	0
Channel 2	Input_2	0-20 mA	0to20000	0
Channel 3	Input_3	0-20 mA	0to20000	0
Channel 4	Input_4	0-20 mA	0to20000	0
Channel 5	Input_5	0-20 mA	0to20000	0
Channel 6	Input_6	0-20 mA	0to20000	0
Channel 7	Input_7	0-20 mA	0to20000	0
Channel 8	Input_8	0-20 mA	0to20000	0

SUBMIT

4. Click Configuration device will ask User Name & Password for log in setting page.



For default from manufacturer User Name is "admin" Password is "1234" which can chnge in later.

5. Configuration page and setting data.

Overview	Network Configuration
Remote Server Configuration	MAC Address : D8:80:39:15:D7:3A Host Name : PMBOARD ☐ Enable DHCP ☒ Enable DHCP SERVER IP Address : 192.168.1.10 Gateway : 192.168.1.1 Subnet Mask : 255.255.255.0 Primary DNS : 192.168.1.1 http port : 80 Modbus port : 501

Name	Description	Default
MAC Address	MAC Address value is specific value for each device. Form is HH:HH:HH:HH:HH:HH can not change value.	-
Host Name	Host Name of deviceyou can enter to device by Host Name beside enter by IP Address directly such as Http://pmboard maximum 15 letters and no gap.	PMBOARD
Enable DHCP	DHCP is choice for receive value from other device automatic if enable module would be set by Address From Router or Switch	Disable
Enable DHCP Server	Enable DHCP Server is device for setting the value Such as IP Address to other	Enable
IP Address	Device IP Address	192.168.1.10
Geteway	IP Address of Geteway device by normal usually be Router or Switch	192.168.1.1
Subnet Mask	Subnet Mask	255.255.255.0
Primary DNS	Primary DNS (Normally, point to Geteway)	192.168.1.1
http port :	can set 80 or 8,000-8,200	80
Modbus Port	Port number of this device for protocol MODBID	501

System Configuration	
USER :	admin
Password :	*****
Input 1 Type :	4-20 mA
Input 2 Type :	4-20 mA
Input 3 Type :	4-20 mA
Input 4 Type :	4-20 mA
Input 5 Type :	4-20 mA
Input 6 Type :	4-20 mA
Input 7 Type :	4-20 mA
Input 8 Type :	4-20 mA
Display Input 1 :	show value by Input Type
Display Input 2 :	show value by Input Type
Display Input 3 :	show value by Input Type
Display Input 4 :	show value by Input Type
Display Input 5 :	show value by Input Type
Display Input 6 :	show value by Input Type
Display Input 7 :	show value by Input Type
Display Input 8 :	show value by Input Type
Zero Input 1 :	4-20 mA
Span Input 1 :	4-20 mA
Zero Input 2 :	4-20 mA
Span Input 2 :	4-20 mA
Zero Input 3 :	4-20 mA
Span Input 3 :	4-20 mA
Zero Input 4 :	4-20 mA
Span Input 4 :	4-20 mA
Zero Input 5 :	4-20 mA
Span Input 5 :	4-20 mA
Zero Input 6 :	4-20 mA
Span Input 6 :	4-20 mA
Zero Input 7 :	4-20 mA
Span Input 7 :	4-20 mA
Zero Input 8 :	4-20 mA
Span Input 8 :	4-20 mA
Module Name :	PM_8ANALOG_INPUT
Input 1 Name :	Input_1
Input 2 Name :	Input_2
Input 3 Name :	Input_3
Input 4 Name :	Input_4
Input 5 Name :	Input_5
Input 6 Name :	Input_6
Input 7 Name :	Input_7
Input 8 Name :	Input_8
Save Config	

Name	Description	Default
USER	User Name to log in to Configuration Maximum 10 letters.	admin
Password	Password to log in to Configuration Maximum 10 letters.	1234
Input 1 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 2 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 3 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 4 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 5 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 6 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 7 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Input 8 Type	Can choose Input Type 0-20 mA, 4-20 mA, 0-1 VDC ±1 VDC, 0-5 VDC, ±5 VDC, 0-10 VDC, ±10 VDC	0-20 mA
Display Input 1	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 2	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 3	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 4	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 5	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 6	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 7	Can choose Display Input to show value as Input Type 0 to 65536 or Zero Span	to show value as Input Type
Display Input 8	Can choose Display Input to show value as Input Type 0 to 65536 หรือ Zero Span	to show value as Input Type
Zero Input 1	Can set the value since -32768 to 32767	0
Span Input 1	Can set the value since -32768 to 32767	10000
Zero Input 2	Can set the value since -32768 to 32767	0
Span Input 2	Can set the value since -32768 to 32767	10000
Zero Input 3	Can set the value since -32768 to 32767	0
Span Input 3	Can set the value since -32768 to 32767	10000
Zero Input 4	Can set the value since -32768 to 32767	0
Span Input 4	Can set the value since -32768 to 32767	10000
Zero Input 5	Can set the value since -32768 to 32767	0
Span Input 5	Can set the value since -32768 to 32767	10000
Zero Input 6	Can set the value since -32768 to 32767	0
Span Input 6	Can set the value since -32768 to 32767	10000
Zero Input 7	Can set the value since -32768 to 32767	0
Span Input 7	Can set the value since -32768 to 32767	10000
Zero Input 8	Can set the value since -32768 to 32767	0
Span Input 8	Can set the value since -32768 to 32767	10000
Module Name :	Module Name for device can set Maximum 20 letters.	PM_8ANALOG_OUTPUT
Input 1 Name :	Name Input 1 Maximum 10 letters.	Input_1
Input 2 Name :	Name Input 2 Maximum 10 letters.	Input_2
Input 3 Name :	Name Input 3 Maximum 10 letters.	Input_3
Input 4 Name :	Name Input 4 Maximum 10 letters.	Input_4
Input 5 Name :	Name Input 5 Maximum 10 letters.	Input_5

Name	Description	Default
Input 6 Name :	Name Input 6 Maximum 10 letters	Input_6
Input 7 Name :	Name Input 7 Maximum10 letters	Input_7
Input 8 Name :	Name Input 8 Maximum10 letters	Input_8

After press Save Config module Restart the device.

Reboot In Progress...

You settings were successfully saved, and the board is now rebooting to configure itself with the new settings.

Your board is now located at : [http:// PMBOARD/](http://PMBOARD/)

Reconnection Instruction

1. Did you change the hostname, IP or MAC address?

If is necessary to clear the address caches in you web browser and OS. From the command prompt in Windows, enter "nbtstat-R" to clear the hostname cache, close you current web browser, open a new web browser, and then try to access the web address above.

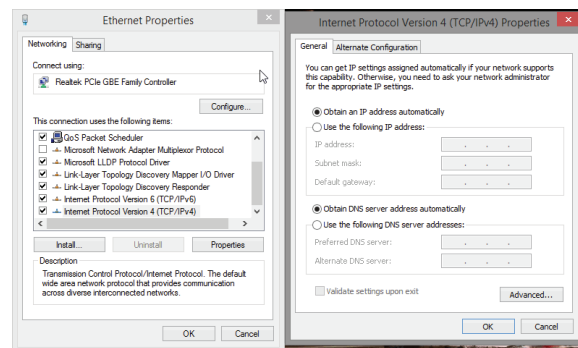
2. Did you try the IP address?

Try accessing the board directly at the IP address shown on the LCD screen. (ex : enter "http://192.168.5.23/" into you browser). If this fails, then the IP address you set isnot reachable. Try the step below.

6. Test the connection between between Computer with device.

if Computer connect with Network system will must change IP Address that

got from Local Network.



Example

IP Address device is 192.168.1.50 and needs to check in system that there are device IP Address in Network system or not.

- Open the windows start menu
- Click Run
- Fill "ping 192.168.1.50" in the gap

if device and connect to Network successful program will reply

" Reply from 192.168.1.50 " and data for reply.

* if found the problem program will reply " Request time out "

check Power Supply, Configuration setting of device.



PB-04

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