PBH-204

(Programmable I/O Controller)

Overview

PBH-204 is a Programmable I/O Controller supporting 4 input/output ports and a RS232/RS422/RS485 serial interface. Embedded with a *PHPoC interpreter, PBH-204 allows you to realize desired features with user-defined functions.

Besides, PBH-204 is equipped with a USB port to simply add wireless LAN networking capabilities to serial devices by plugging in a wireless LAN adapter. Thanks to these features, PBH-204 is flexible in application and sufficient to meet diverse needs.

*PHPoC is a script language compatible with PHP. (Syntax and internal functions limited.)
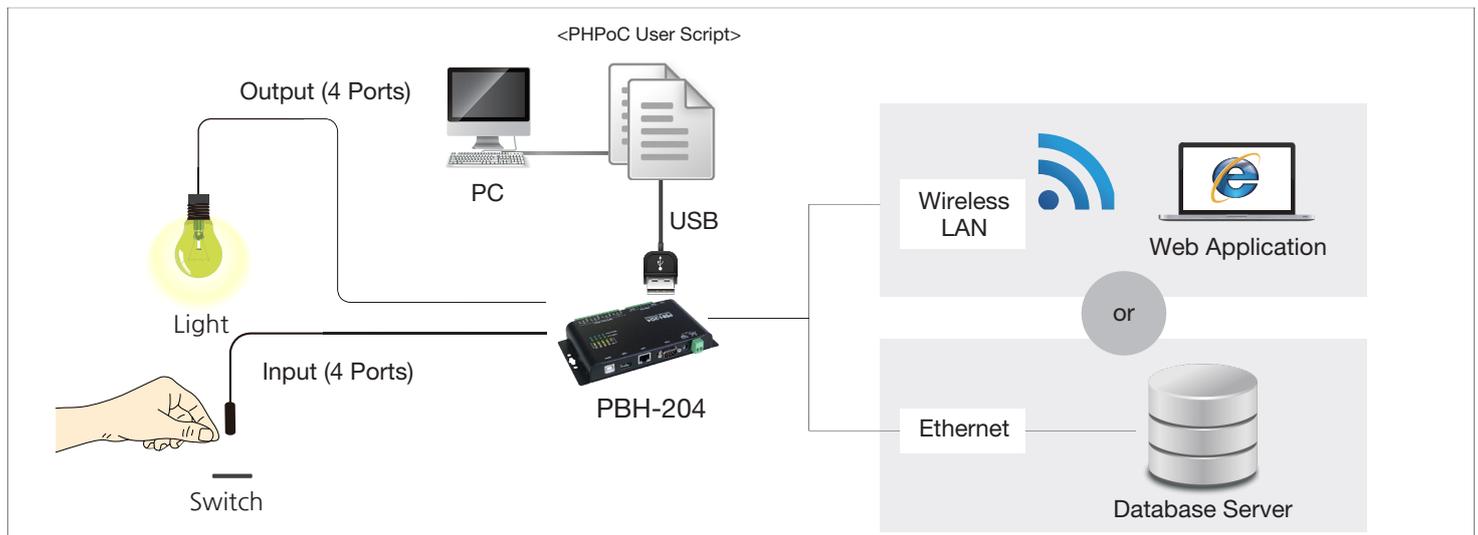
Highlights

- PHPoC interpreter embedded (PHP on Chip)
- Uploading and debugging codes via USB
- Ethernet 10Base-T or 100Base-TX (Auto-Sensing)
- IEEE 802.11b/g (USB wireless LAN adapter required)
- 4 × Digital Input Port(Dry/Wet Contact, NPN/PNP)
- 4 × Digital Output Port(Relay – NC/NO)
- Serial Port (RS232/RS422/RS485)
- Industrial temperature range(-40℃~+85℃)

* PHPoC
  - PHP compatible script language
  - C/PHP compatible expression parser
  - Multi-tasking capability (Application, HTTP server)
  - In field run-time debugger

Applications

<PHPoC User Script>

Output (4 Ports)

PC

Light

Input (4 Ports)

Switch

USB

PBH-204

Wireless LAN

Web Application

or

Ethernet

Database Server

Specifications

Digital Input Port	
Digital Input Interface	4 Input Ports with Photo-coupler Isolation
	Dry contact / Wet Contact / NPN / PNP Interface Support
Connector	5mm pitch Termnial Block

Digital Output Port	
Digital Output Interfae	4 Output Ports with Relay Out Interface
	COM/NO/NC Interface for Each Output
	NO (Normal Open) - DC 30V/5A
	NC (Normal Close) - DC 30V/1A
Connector	5mm pitch Termnial Block

Serial Physical Interface	
Serial Interface	RS232 - RXD, TXD, RTS, CTS, DTR (Always ON), GND
	RS422 - TX+, TX-, RX+, RX-, GND with embedded 100K biasing resistors and TVS
	RS485 - TRX+, TRX-, GND with embedded 100K biasing resistors and TVS
Connector	9 pin D-sub male

Serial Port Properties	
Baudrate	1,200 bps ~ 230,400 bps
Data Bits	8 bits, 7 bits with parity
Parity	None, Even, Odd, Mark, Space
Stop Bit	1, 2
Flow Control	RTS/CTS

Network Interface	
Ethernet	10Base-T or 100Base-TX (RJ45)
	Ethernet Speed Auto Sense
	1:1 or Cross-over Cable Auto Sense
Wireless LAN	Ralink RT3070/5370 USB wireless LAN dongle required on the USB A Connector
	IEEE802.11b/g
	WEP, WPA-PSK, WPA2-PSK, WPA-Enterprise (PEAP, EAP-TTLS, EAP-TLS)

USB Interface	
USB A Connector	Ralink RT3070/5370 USB wireless LAN dongle for Wireless LAN
USB B Connector	For PC connection to upload/download user PHPoC script

Software Functions	
PHPoC	Embedded PHP (Limited syntax & Internal functions) script language
Protocols	TCP, UDP, IP, HTTP, ICMP, DHCP
Security	SSL/TLS, MD5/SHA1, DES/RC4/AES/SEED

Indicators	
Power	Red
Status	Yellow
DI/DO	Green
User Programmable LED	LED A ~ H (Yellow)

Supplementary Software	
PHPoC Writer	PHPoC Uploading Files, Setting, Upgrading F/W
PHPoC Debugger	PHPoC Writer's Functions + Debugging + Downloading / Editing Files
Dimension	
Size	180mm x 110mm x 26mm
Power	
PWR1	DC8.5V ~ DC38V with Polarity Auto Recovery Function
PWR2	DC5V +/- 5% with Reverse Voltage Protection and Surge Protection
Setup	DC5V +/- 5% with Reverse Voltage Protection
Power Consumption	Typically 4.2W (without USB Wireless LAN adapter)
Temperature Condition	
Operating Temperature	-40℃ ~ +85℃ (without USB Wireless LAN adapter)
Storage Temperature	-40℃ ~ +85℃ (without USB Wireless LAN adapter)