PWR-F-D4IO-Bx

802.11 b/g/n Wi-Fi boxed industrial modules,
Converter 4Digital I/O, Client / Server type

PWR-F-D4IO-BI   Ordering Code: CMP-F-S05-BI
PWR-F-D4IO-BO   Ordering Code: CMP-F-S05-BO

PRODUCT OVERVIEW

PWR-F-4DIO-Bx are converters from 4 digital I/O to Wi-Fi and viceversa.

They are industrial Wi-Fi modules in a box DIN-rail enclosure. They can be powered with a range between 6.5Vdc and 30Vdc.

PWR-F-4DIO-BI module is a converter from digital Inputs to Wi-Fi. Digital inputs can accept a Voltage between 0 and 30Vdc.

PWR-F-4DIO-BO module is a converter from Wi-Fi to digital Outputs. Digital outputs have an output range between 0 and 30Vcc.

Used both can be simulate the wire cutting between two devices, connected each other to digital I/O for monitoring and execution.

PWR-F-4DIO-Bx are Wi-Fi client / server modules. This means that they are able to autonomously connect to a server, also public, and communicate with it. The connection can be also ad-hoc and infrastructure with a standard Wi-Fi access point.

DATA INTERFACE

The PWR-F-4DIO-BI module (digital inputs) sends with TCP/IP a byte every 100ms or at every PIN value change. This byte contains the 4 PIN status.

In the same way, with PWR-F-4DIO-BO module (digital outputs) is possible to modify the status of 4 PIN by sending a byte that contains the required configuration to a TCP/IP socket.

READY FOR CLOUD

Industrial machines interfaced with PWR-F-4DIO-Bx modules, are ready to be connected to a Cloud Service, like Wiicom Sense Cloud, to share data and send commands from everywhere.
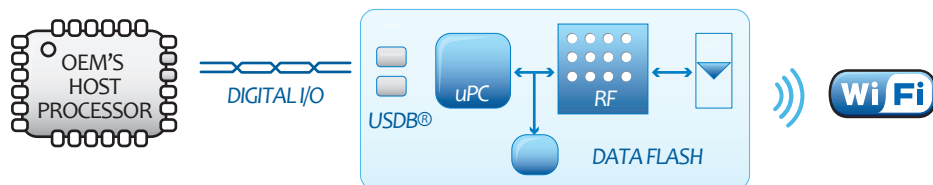
NO SOFTWARE NEEDED

PWR-F-4DIO-Bx modules are ready in few steps. Thanks to Wiicom CompactReadyGo configurator, user can set network parameters in an easy way.

It will not necessary to develope or modify any software, on the module or on the host machine.

APPLICATION BLOCK DIAGRAM

OEM'S HOST PROCESSOR — DIGITAL I/O — USDB® — uPC — RF — DATA FLASH — Wi-Fi

FIELD INTERFACE

Data Interface	Coded transmission / reception (1 byte, coding 4 I/O, ex. 0000xxxx)
Electrical Interface	PWR-F-D4IO-BI: 4 digital inputs, range 0-30Vdc
	PWR-F-D4IO-BO: 4 digital outputs, range 0-30Vcc

RF CHARACTERISTICS

WLAN Functions	Ad-hoc and Infrastructure modes
Network Standard Support	IEEE 802.11b/g single stream n
RF Data Rates	802.11n: 6.5, 13, 19.5, 26, 39, 52, 58.5, 65 Mbps
	802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
	802.11b: 1, 2, 5.5, 11 Mbps
RF Output Power	15-17 dBm
RF Frequency Band	2.412 - 2.484 GHz (integrated antenna)
Security Protocol	WEP, WPA and WPA2-PSK
Network Protocols	TCP, IPv4, ARP, ICMP

ENVIRONMENT CONDITIONS

Operating Temperature	Industrial (-40°C to +85°C)
Dimension	50 x 72 x 104 mm (box DIN-rail enclosures)

POWER SUPPLY

RUN mode, Radio ON	RX = 56mA, TX = 160mA (@6.5V)
Supply Voltage	6.5 - 30 Vdc
Digital inputs Voltage	0 - 30 Vdc
Digital outputs Voltage	0 - 30 Vcc

PRODUCT SUPPORT

The PWR-F-D4IO-Bx modules can be used in a wide range of applications. It is ideal to be used by industry leaders in the areas of industrial, smart energy, logistic, health and medical, automotive, audio, and consumer applications.

Through distributors Wiicom has presence in all countries in Europe. For additional information, please visit **www.wiicom.it** or contact directly our customer web support.