

Serial WiFi adapter – Industrial
Part no. WF5000B



The WF5000B is a light-industrial grade serial RS232 to WiFi adapter which can be used to connect any standard RS232 serial device to a computer over an open or secure wireless network.

It has a strong aluminum housing with screw mounting holes for easy installation which makes it ideal for most factory environments and other commercial facilities.

Supported network protocols are TCP, UDP, ARP, ICMP, DHCP, DNS, HTTP using the 802.11b/g/n standards in AP or STA modes. Supported security protocols are OPEN, OPENWEP, SHAREDWEP, WPA-PSK and WPA2-PSK.

The parameters of the adapter can be configured by a web-browser over WiFi or through the serial port by using the downloadable configuration software.

Please download the latest drivers and user guides for this product from:

www.USconverters.com

Default IP: 10.10.100.254
User: **admin**, Password: **admin**

Application Diagram A



Wireless standard	802.11 b/g/n
Frequency range	2.412GHz-2.484GHz
Transmit power	802.11b: +20dBm(Max.)
	802.11g: +18dBm(Max.)
	802.11n: +15dBm(Max.)
Receiver Sensitivity	802.11b: -89dBm
	802.11g: -81dBm
	802.11n: -71dBm
Antenna	External 3dbi antenna
Baud rate	300 - 460800bps
Data bits	5, 6, 7, 8
Parity	None, Odd, Even, Mark, Space
Stop bits	1, 2
Flow control	CTS/RTS, None
Ethernet	100Mbps, AUTO MDI/MDIX
RS232 signals	TX, RX, RTS, CTS, GND
UDP Multicast supported	No
Operating voltage	5 VDC (+/-5%) max 350mA
Serial Port	RS232, DB9 Male
Operating current	1500mA (max)
Operating temperature	-13°F to 185°F (-25°C to 85°C)
Storage temperature	-40°F to 185°F (-40°C to 85°C)
Dimensions	83×80×25mm
Network type	STA, AP, STA+AP mode
Number of simultaneous clients	32 in TCP Server mode
Security	OPEN, OPENWEP, SHAREDWEP, WPA-PSK and WPA2-PSK
Work mode	Transparent Transmission
UDP Multicast supported	No
Serial command	AT+ instruction set
Network Protocols	TCP, UDP, ARP, ICMP, DHCP, DNS, HTTP
Max. TCP Connections	32
User Configuration	Web-browser (over WiFi), by AT commands or by software utility
Certifications	FCC, CE, ROHS

Included items:

- ◆ WF5000B x 1
- ◆ Antenna x 1
- ◆ Serial cable, female/female (null modem) x 1
- ◆ CD with software and documentation x 1

Indicator Lights

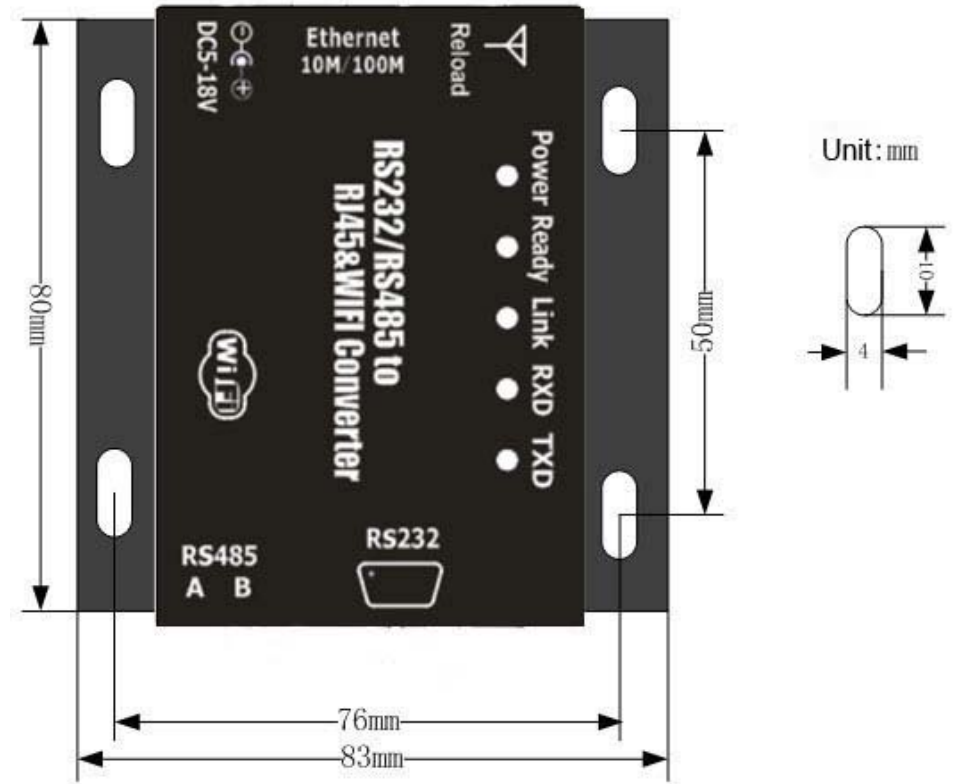
Indicator	Function	Description
Pwr	Power on	Converter has power
Ready	Converter ready	On when booted and ready
Link	Network link	On when network is connected
TX	Transmit data	Flash when sending data
RX	Receive data	Flash when receiving data

Reset button:

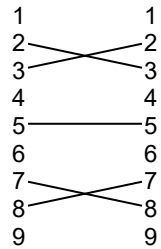
The reset button is used for resetting the converter back to factory settings. When the green “Ready” LED is on, depress the reset button for more than 5 seconds, then release the button. About 2 seconds after releasing the reset button the green “Ready” LED light should turn OFF and come ON again within 10 seconds. When the green “Ready” LED light is solid ON the converter is reset to factory defaults and ready to use again.

Pin configuration (DB9 connector):

Pin no.	RS232 DB9 Male
1	-
2	RX
3	TX
4	-
5	GND
6	-
7	RTS
8	CTS
9	-



Pin configuration (included DB9 female/female null-modem cable):



MAC Addresses:

There are four MAC address on the WF5000B, one for AP, one for STA, one for LAN and one for WAN. An example could be the following addresses:

AP: D8B04CE09A34
STA: D8B04CE09A35
LAN: D8B04CE09A36
WAN: D8B04CE09A37

STA MAC address is AP MAC address +1, LAN MAC address is STA MAC address +1, WAN MAC address is LAN MAC address +1. The MAC address on the WF5000B's label shows the default AP MAC address.

To access technical support, please visit the U.S. Converters website at:
www.USconverters.com
Here you will find:

- Latest drivers and updates for download
- Technical tips
- Documentation
- Configuration support
- and much more...

Feel free to contact our technical support team at mail@usconverters.com with any issues.

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