

# WIRELESS BRIDGES

Wireless cable replacements with micro USB and multiple COM ports.



## PRODUCT FEATURES

- 7-30VDC input
- Adjustable RF output power
- Configurable channels and addressing
- Different power and frequency options for shorter or longer range
- Compatible with other Datawave wireless bridge products
- Bidirectional Communication
- Optional DIN Rail mount
- Over-the-air compatible with Digi XBee



# DATAWAVE

The Datawave Wireless Bridge products are designed to act as a wireless cable replacements for RS-232 and RS-485 protocols as well as for 0-10V, 4-20mA Analog signals and standard 0-5V or 0-3.3V Digital signals. All products also have a micro USB port that enumerates as a USB composite device with multiple COM ports. One COM port can be used for data while the second COM port provides a terminal for device settings. All radio parameters can be configured with AT commands or via free third party software. The USB wireless Bridge has a micro USB for data and configuration. The RS232 Wireless Bridge has a DB9 DCE female connector for data and radio configuration and

a micro USB port to configure other settings. The RS-485 and Analog/Digital I/O products have a five pin screw terminal for data and signals and a micro USB port for configuration.

It is possible to mix and match wireless bridge products. The RS-232 Wireless Bridge will communicate with the RS-485, Analog and Digital I/O and USB wireless bridge products that share the same radio configuration. By using an RS-485 Wireless Bridge at point A and a RS-232 Wireless Bridge at point B, the wireless bridges can act as a RS-485 to RS-232 over-the-air converter.



## SPECIFICATIONS

	24LP	24HP	09SX
Data Rate	250Kbps	250Kbps	Low data rate: 10 kb/s; Middle data rate: 110 kb/s; High data rate: 250 kb/s
Indoor/Urban Range	Up to 200 ft.	Up to 300 ft.	Up to 1000 ft.
Outdoor/ RF Line-of-Sight Range	Up to 4000 ft.	Up to 2 miles	Up to 10 miles
Transmit Power	63 mW	6.3 mW	1 Watt
Receive Sensitivity	-101 dBm	-101 dBm	Low data rate: -113dBm Mid data rate: -106dBm High data rate: -103dBm

## FEATURES

	24LP	24HP	09SX
Frequency Band	2.4 GHz	2.4 GHz	902-928 MHz
Serial Data Interface	RS-232 DB9F/DCE or RS-485 5-position wire terminal block USB port configurable between RS-422 duplex and RS-485		
USB Data Interface	Enumerates as Windows, MAC COM Ports 9600 Baud default. Standard rates up to 115200.		
Analog Interface and Digital I/O	Four Configurable channels Analog: 0-10V input or output. 4-20mA input. Digital: 0-3.3V or 0-5V input or output. 50mA drive capability.		
Indicators	Power: Blue, TX: Green, RX: Yellow, Special Function: Green		
Operating Temperature	-40 to +70C		

## POWER REQUIREMENTS

	24LP	24HP	09SX
Power Input	7-30 VDC - Molex locking connector (Mating PN: 0050579402)		
Power Supply	Supplied wall adapter: 110V- 240VAC to 12V 1A		
Transmit Current	12 mA @ 12V	40 mA @ 12V	270mA @12V
Receive Current	12 mA @ 12V	12 mA @ 12V	17mA @12V



**PART NUMBERS**                      **DESCRIPTIONS**

WB-USB-24LP-A	6.3 mW Transmit power 2.4 GHz w/ USB data port
WB-USB-24HP-A	63 mW Transmit power 2.4 GHz w/ USB data port
WB-USB-09SX-A	1W Transmit power 900 MHz w/ USB data port
WB-RS232-24LP-A	6.3 mW Transmit power 2.4 GHz w/ USB & RS-232 data ports
WB-RS232-24HP-A	63 mW Transmit power 2.4 GHz w/ USB & RS-232 data ports
WB-RS232-09SX-A	1W Transmit power 900 MHz w/ USB & RS-232 data ports
WB-RS485-24LP-A	6.3 mW Transmit power 2.4 GHz w/ USB & RS-485 data ports
WB-RS232-24HP-A	63 mW Transmit power 2.4 GHz w/ USB & RS-485 data ports
WB-RS485-09SX-A	1W Transmit power 900 MHz w/ USB & RS-485 data ports
WB-ADIO-24LP-A	6.3 mW Transmit power 2.4 GHz w/ USB & 4 Channel Analog or Digital
WB-ADIO-24HP-A	63 mW Transmit power 2.4 GHz w/ USB & 4 Channel Analog or Digital
WB-ADIO-09SX-A	1W Transmit power 900 MHz w/ USB & 4 Channel Analog or Digital

