

# XStream-PKG-UA™

## USB RF Modems

900 MHz & 2.4 GHz

### XSTREAM-PKG-UA INCLUDES:

- (1) XStream-PKG-U USB RF Modem
- (1) Quick Start Guide
- (1) CD (software & documentation)
- (1) 1/2 wave antenna
- (1) USB cable (6')



USB  
ENABLED



## ADDITIONAL FEATURES

- Plug-and-communicate (no configuration required)
- USB (Universal Serial Bus) interface
- USB bus powered (no external power supply needed)
- Transparent operation supports existing software & systems
- Simple configuration using software & standard AT commands
- Retries & acknowledgements for guaranteed packet delivery
- Peer-to-peer, point-to-point & point-to-multipoint networks
- Up to 65,000 network addresses available
- Allows up to 7 Frequency Hopping Spread Spectrum independent pairs (networks) to operate in close proximity
- Low power modes for current consumption as low as 50 mA
- Host interface baud rates from 1200 bps to 57600 bps
- XON / XOFF or hardware flow control
- Signal strength reporting for link quality monitoring & debugging
- Support for multiple data formats (7/8 bits, Even/Odd/No Parity)

### Options

- 900 MHz or 2.4 GHz license-free ISM bands
- 9600 bps or 19200 bps over-the-air data rates
- Available without accessories as XStream-PKG-U

## APPLICATIONS

Monitoring of  
remote systems



Production reporting  
of active systems



Home automation &  
building control



Supervisory control  
& data acquisition



Vehicle management  
& asset tracking



The XStream-PKG-UA USB RF Modems are MaxStream's longest range, low power wireless OEM modules, coupled with a USB interface board and mounted in an aluminum enclosure. This radio modem is optimized for mobile applications, allowing MaxStream customers to quickly test, monitor and control their wireless systems through a laptop or stationary PC's USB port.

These radio modems come equipped with the features of our XStream OEM RF modules. Systems integrators love the functionality provided by the serial connection, power switch, indicator lights, high quality antenna, mounting plates and power source inputs.

The 900 MHz radio modem has the best sensitivity in the industry, making it one of the longest range, low cost radio modems available to date.

The 2.4 GHz radio modem can provide high performance and dependable operation for deployment throughout the world (visit the MaxStream website for more details).

These radio modems are perfect for applications in automatic meter reading (AMR), supervisory control and data acquisition (SCADA), home automation, security, instrument monitoring and point of sale (POS) systems among many others.

These radio modems require no configuration to operate, simply plug-and-communicate. Output serial data from any USB port into the radio modem to send FCC & ETSI approved, frequency hopping spread spectrum data and capture it on all receivers within range on the network.



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Specifications	900 MHz	2.4 GHz	
* Radio modems are also available without accessories (XStream-PKG-U)			
<b>General</b>			
<b>Frequency</b>	902-928 MHz	2.4000-2.4835 GHz	
<b>Spreading Spectrum Type</b>	Frequency hopping, direct FM	Frequency hopping, direct FM	
<b>Network Topology</b>	Point-to-multipoint, point-to-point multi-drop transparent	Point-to-multipoint, point-to-point multi-drop transparent	
<b>Channel Capacity</b>	7 hop sequences share 25 frequencies	7 hop sequences share 25 frequencies	
<b>Serial Data Interface</b>	USB 1.1, 11 Mbps	USB 1.1, 11 Mbps	
<b>I/O Data Rate</b>	Software selectable 1200-57,600 bps	Software selectable 1200-57,600 bps	
<b>Power Requirements</b>			
<b>Supply Voltage</b>	5-12 VDC external or USB bus power	5-12 VDC external or USB bus power	
<b>Transmit Current</b>	250 mA	250 mA	
<b>Receive Current</b>	120 mA	120 mA	
<b>Power Down Current</b>	50 mA	50 mA	
<b>Physical Properties</b>			
<b>Enclosure Type</b>	Extruded aluminum, black anodized	Extruded aluminum, black anodized	
<b>Enclosure size</b>	2.75" x 5.50" x 1.124" (7.90 cm x 13.90 cm x 3.80 cm)	2.75" x 5.50" x 1.124" (7.90 cm x 13.90 cm x 3.80 cm)	
<b>Weight</b>	7.1 oz (200 g)	7.1 oz (200 g)	
<b>Operating Temperature</b>	0° to +70° C (commercial)	0° to +70° C (commercial)	
<b>Antenna</b>			
<b>Type</b>	1/2 wave dipole whip	1/2 wave dipole whip	
<b>Gain</b>	2.1 dBi	2.1 dBi	
<b>Length</b>	6.75" (17.1 cm)	5.25" (13.3 cm)	
<b>Connector</b>	Reverse-polarity SMA	Reverse-polarity SMA	
<b>Impedance</b>	50 ohms unbalanced	50 ohms unbalanced	
<b>Certifications</b>			
<b>FCC Part 15.247</b>	OUR9XSTREAM	OUR-24XSTREAM	
<b>Industry Canada</b>	4214A-9XSTREAM	4214A 12008	
<b>Europe</b>	N/A	ETSI	
<b>Performance</b>			
<b>Indoor/Urban Range</b>	Up to 1500' (457 m)	Up to 600' (183 m)	
<b>Outdoor LOS Range</b>	Up to 7 mi. (11 km) w/ dipole Up to 20 mi. (32 km) w/ high-gain	Up to 3 mi. (5 km) w/ dipole Up to 10 mi. (16 km) w/ high-gain	
<b>Serial Data Throughput</b>	<b>9600 bps</b>	<b>19.2 kbps</b>	<b>9600 bps</b> <b>19.2 kbps</b>
<b>RF Baud Rate</b>	10,000 bps	20,000 bps	10,000 bps      20,000 bps
<b>Transmit Power Output</b>	140 mW (21.5 dBm)	140 mW (21.5 dBm)	50 mW (17 dBm)      50 mW (17 dBm)
<b>Receiver Sensitivity</b>	-110 dBm	-107 dBm	-105 dBm      -102 dBm