

# 9XCite-PKG™ RF Modems

900 MHz - Low Cost - Stand-alone Radio Modems by MaxStream, Inc.



## Long Range Performance

Indoor/urban Range:	up to 300' (90 m)
Outdoor line-of-sight Range:	up to 1000 ft. (300 m) w/ 2.1 dB dipole antenna
Receiver Sensitivity:	-108 dBm (@9600 bps)
Throughput Data Rate:	9,600 or 38,400 bps

## Low Power

Transmit Current:	105 mA
Receive Current:	55 mA
Power-down Current:	< 1 mA

## Easy-to-Use

No configuration is necessary for out-of-box RF operation. Simply feed data into one modem, then the data is sent out the other end of the wireless link.

If more advanced functionality is needed, the modems support an extensive set of commands.

## Data Interface Options



**9XCite-PKG-R™**  
**RS-232/485**



**9XCite-PKG-U™**  
**USB**

## Key Features



### Price-to-Performance Value.

Due to innovations stamped in its design, the 9XCite Modem yields 2-8x the range of competing modems. This allows OEMs and integrators to cover more ground with fewer devices.

Additionally, 9XCite Modems are easy-to-use and therefore greatly reduce the cost of data system development.



### Receiver Sensitivity.

MaxStream modems 'hear' what others cannot; therefore supplying greater range and reliability in wireless links.

For every 6 dB gained in TX power or RX sensitivity, OEMs and integrators can double the range of a wireless link. 9XCite Modems outperform higher costing modems due in large part to range gained through superior RX sensitivity.



### Low Power Consumption.

For power-sensitive applications; Pin, Serial Port and Cyclic Sleep Modes are available. Power-down currents reach below 1 mA.



### FCC (U.S.A) & IC (Canada) Approved.

Systems that contain XCite Modems inherit MaxStream's certifications. Contact MaxStream for a complete list of government agency approvals.

## Sample Applications

Sensor data capture  
in embedded systems



Barcode scanning  
& point-of-sale Systems



Home automation &  
building control



SCADA (Supervisory control  
& data acquisition)



Fleet management  
& asset tracking



### Call today!

- Free RF Consultation
- Volume Discounts
- Development Kit Pricing



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# 9XCite-PKG™ 900 MHz RF Modems

Specifications		9XCite-PKG-R™ (RS-232/485)	9XCite-PKG-U™ (USB)
<b>Performance</b>	Indoor/Urban Range (w/ 2.1 dB dipole antenna)	up to 300 ft. (90 m)	
	Outdoor RF line-of-sight Range (w/ 2.1 dB dipole antenna)	up to 1000 ft. (300 m)	
	Transmit Power Output	4 mW (6 dBm)	
	Receiver Sensitivity	-108 dBm (@9,600 bps Throughput Data Rate) -104 dBm (@38,400 bps)	
	Interface Data Rate (software selectable)	1200 - 57600 bps	
	Throughput Data Rate	9,600 or 38,400 bps	
	RF Data Rate	10,000 bps (@9,600 bps Throughput Data Rate) 41,666 bps (@38,400 bps)	
<b>Networking &amp; Security</b>	Frequency Range	ISM 902 - 928 MHz	
	Spread Spectrum	FHSS (Frequency Hopping Spread Spectrum)	
	Modulation	FSK (Frequency Shift Keying)	
	Supported Network Topologies	Peer-to-peer (no master/slave dependencies), Point-to-point, Point-to-multipoint & Multidrop	
	Channel Capacity	7 hop sequences (Hopping Mode) & 25 single frequency channels (Single Channel Mode)	
	Network Filtration Layers	VID, Hopping Channel & Destination Address	
<b>Antenna</b>	Connector Options	RPSMA (reverse polarity SMA)	
	Impedance	50 ohms unbalanced	
<b>Certifications</b> (partial list)	FCC Part 15.247	OUR-9XCITE	
	Industry Canada (IC)	4214A-9XCITE	
		<b>9XCite-PKG-R™</b>	<b>9XCite-PKG-U™</b>
<b>Power Requirements</b>	Power Supply Voltage	7 - 18 V	5 - 12 VDC external or USB bus power
	Transmit Current	105 mA	105 mA
	Receive Current	55 mA	55 mA
	Power Down Current	< 1 mA	< 1 mA
<b>Physical Properties</b>	Size	2.750" x 5.500" x 1.125" (6.99cm x 13.97cm x 2.86cm)	
	Weight	7.1 oz (200 g)	
	Data Connection	DB-9	USB
	Operating Temperature	0 to 70° C (commercial)	

Specifications are subject to change without notice.



**For the best in wireless data solutions and support, contact MaxStream, Inc.**

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