

9XTend-NEMA™ RF Modem

1 Watt - 900 MHz - Weatherproof Radio Modems by MaxStream, Inc.

Long Range Performance

Indoor/urban Range:	up to 3000' (900 m)
Outdoor line-of-sight Range:	up to 40 miles (64 km)
Transmit Power Output:	1mW - 1W (software selectable) up to 4 Watts EIRP w/6 dB antenna
Receiver Sensitivity:	-110 dBm (@9600 bps)
Throughput Data Rate:	9600 or 115200 bps (software selectable)

Advanced Networking & Security

Encryption:	256-bit AES Encryption AES algorithm is FIPS-197 certified
Spread Spectrum Type:	FHSS (Frequency Hopping Spread Spectrum)
Streaming, Acknowledged & Multi-Transmit modes supported	

Easy-to-Use

Built-in RS-232 Interface
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 long range wireless link.
If more advanced functionality is needed, the modem supports an extensive set of AT and binary commands.



NEMA-4 Rated Enclosure

Houses MaxStream's 9XTend™ OEM RF Module
(eeProductCenter™ product-of-the-year in 2004)

Highlights



Price-to-Performance Value.

Due to innovations stamped in its design, the 9XTend-NEMA yields 2-8x the range of competing modems. This allows OEMs & integrators to cover more ground with fewer devices. Additionally, 9XTend Modems are easy-to-use and therefore greatly reduce the cost of data system development.



256-bit AES Encryption.

The 9XTend provides security through data encryption that is not available on competing modems. The Advanced Encryption Standard (AES) is used with a 256-bit key. No time penalty is incurred during encryption or decryption.



Receiver Sensitivity.

MaxStream modems 'hear' what others cannot; therefore supplying greater range and reliability in wireless links. XTend Modems outperform higher costing modems due in large part to range gained through superior RX sensitivity.



Transmit Power Output.

The 9XTend outputs 1 Watt (30 dBm) of conducted power while consuming only 800 mA current.



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

Contact MaxStream for complete list of certifications.

Sample Applications

Electronic signs



Sensor data capture



Monitoring of remote systems



Fleet management and asset tracking



SCADA (Supervisory control and data acquisition)



Call today!

- Free RF Consultation
- Volume Discounts
- Development Kit Pricing



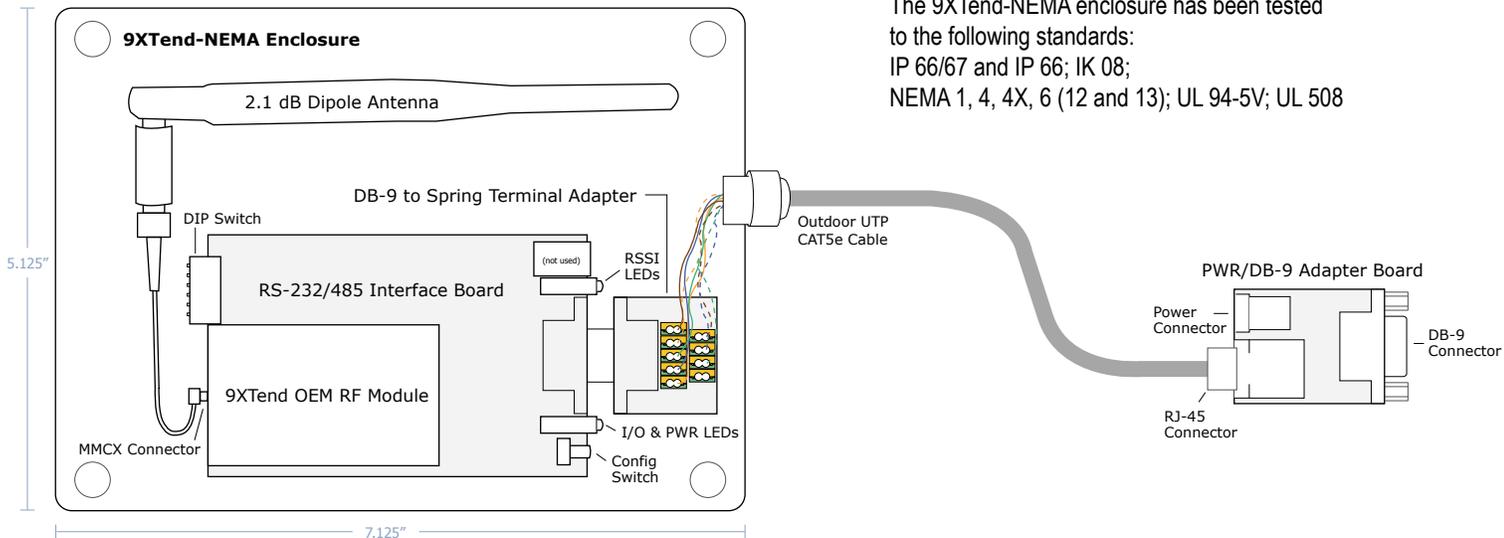
MaxStream®

(866) 765-9885 toll-free in U.S. & Canada
(801) 765-9885 worldwide
www.maxstream.net

9XTend-NEMA™ 900 MHz RF Modem

Specifications		
Performance	Transmit Power Output (software selectable)	1 mW - 1 W (0 - 30 dBm)
	Indoor/Urban Range (w/ 2.1 dB dipole antenna)	up to 3000' (900 m)
	Outdoor RF line-of-sight Range (w/ 2.1 dB dipole antenna)	up to 14 miles (22 km)
	Outdoor RF line-of-sight Range (w/ high gain antenna)	up to 40 miles (64 km)
	Interface Data Rate (software selectable)	1200 - 230400 bps
	Throughput Data Rate (software selectable)	9,600 or 115,200 bps
	RF Data Rate	10,000 bps (@9,600 bps throughput data rate), 125,000 bps (@115,200 bps)
	Receiver Sensitivity	-110 dBm (@9,600 bps throughput data rate), -100 dBm (@115,200 bps)
Networking & Security	Frequency	ISM 902 - 928 MHz
	Spread Spectrum	FHSS (Frequency Hopping Spread Spectrum)
	Supported Network Topologies	Peer-to-peer (no master/slave dependencies), Point-to-point, Point-to-multipoint & Multidrop
	Network Filtration Layers	Hopping Channel, VID (Vendor Identification Number), Destination Address
	Encryption	256-bit AES Encryption AES algorithm meets Federal Information Processing Standard-197 (FIPS-197)
Antenna	Connector	MMCX
	Impedance	50 ohms unbalanced
Certifications (partial list)	FCC Part 15.247	OUR-9XTEND
	Industry Canada (IC)	4214A-9XTEND
Power Requirements	Power Supply Voltage	7 - 28 V
	Receive Current	110 mA
	Pin Sleep Power-down	17 mA
	Serial Port Sleep Power-down	45 mA
	Idle Current (Various Cyclic Sleep Intervals)	19 - 39 mA
	Transmit Current (1mW - 1W TX Power Output)	110 - 800 mA
	Physical Properties	Size
	Weight	12.3 oz (348.7 g)
	Data Connection	DB-9 / screw terminal
	Operating Temperature	-40 to 85° C (industrial)

Inside View of the 9XTend-NEMA RF Modem



Specifications are subject to change without notice.

The 9XTend-NEMA enclosure has been tested to the following standards:
 IP 66/67 and IP 66; IK 08;
 NEMA 1, 4, 4X, 6 (12 and 13); UL 94-5V; UL 508



MaxStream®

355 South, 520 West, ste. 180
 Lindon, UT 84042

© 2005 MaxStream, Inc.

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

phone: (866) 765-9885 (toll-free in U.S. & Canada)
 (801) 765-9885 (worldwide)

fax: (801) 765-9895

web: www.maxstream.net
 (live chat & many other resources available)