

Xeta9L OEM

900 MHz ISM Serial Software Defined Radio

The **Xeta9L** OEM module is a low cost extremely capable and flexible industrial Frequency Hopping Spread Spectrum (FHSS) software defined radio (SDR) supporting the unlicensed 900 MHz frequency band.

The **Xeta9L** OEM module is a serial radio offered as a board level product in a small 2.0" x 1.4" footprint with significant receiver performance.

The **Xeta9L** supports point to point and point to multipoint network types and is configurable as a master or slave.



Key Features

High Speed Over-the-air data rates from 57 kbps to 229 kbps.

Network Types Point to Point and Point to Multipoint.

Network Roles Each radio can be configured as a master or slave.

Adjustable RF Output Power output up to 800 mW (+29 dBm).

Options Available with TTL or RS232 serial interface and commercial or industrial temperature ranges.

Functionality

Operating Modes	Point to Point, Point to MultiPoint
Roles	Access Point, Endpoint, Repeater
Error Handling	CRC, Retransmit on error
Hop Patterns	10 Pseudo Random, 1 Pseudo Random Based off Network ID
Repeater	Store-and-forward
Diagnostics	Network Scan, RF Ping, RF Throughput, RF Statistics

Xeta9L OEM Specifications

Transmitter

Frequency Range	902-928 MHz
Output Power	10 to 800 mW (10 to 29 dBm)
Modulation	2FSK
Data Rates	57, 114, 153 & 229 kbps
Channel Sizes	75, 150, 225 & 300 kHz
Frequency Stability	1.0 ppm
Range	30 miles

Receiver

Channel Size	Sensitivity	Data Rate
75 kHz	-107 dBm	57 kbps
150 kHz	-104 dBm	114 kbps
225 kHz	-103 dBm	153 kbps
300 kHz	-101 dBm	229 kbps
RF Selectivity	50 dB	

Power

Voltage	+5.0 to +15.0 Vdc
Transmit	800 mA @ +5.0 Vdc
Receive	220 mA @ +5.0 Vdc
Idle	175 mA @ +5.0 Vdc

Interfaces

Connector	24-pin Samtec Header
Data	Serial TTL Up to 2 Mbps RS232 Up to 921.6 kbps
Control	Serial TTL 115.2 kbps
RF	MMCX 50 Ohms

Environmental/Physical

Op. Temp.	0°C to +60°C (Commercial) -40°C to +75°C (Industrial)
Humidity	95% @ +40°C non-condensing
Dimensions	2.0" x 1.45" x 0.37"
Weight	24 grams

Frequency Range may vary by Country, for example

Australia, Peru	916-928 MHz
Brazil	902-907 & 916-928 MHz

Ordering

XETA9L-TIFC-C	Board level OEM, TTL interface, Commercial Temp
XETA9L-TIFC	Board level OEM, TTL interface, Industrial Temp
XETA9L-RIFC-C	Board level OEM, RS232 interface, Commercial Temp
XETA9L-RIFC	Board level OEM, RS232 interface, Industrial Temp