DATA SHEET

LINX TECHNOLOGIES
WIRELESS MADE SIMPLE

HIGH PERFORMANCE
HP SERIES
RF DATA MODULES

TXM-900-HP3
RXM-900-HP3

FEATURES

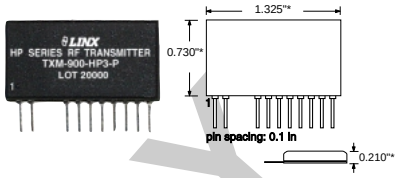
- **Complete 900 Mhz RF TX/RX solution**
  No external components (except antenna) or user tuning required.
- **Up to 120 selectable channels**
  Parallel or serial channel selection options.
- **High data rate**
  50,000 bps max. data rate
- **Outstanding range**
  1000 ft. maximum range. (Line of Sight)
- **Qualified data output, True RSSI, CTS functions**
  Allows for channel qualification and assures data validity.
- **Wide range analog data capability**
  Analog capability for audio or frequency transmission
- **Microprocessor-based synthesized architecture**
  Advanced microprocessor managed synthesized design.
- **Direct interface**
  Logic level serial I/O. Interface directly to microprocessors, UART's, encoder/decoder chips.
- **Cost-effective**
  Lowest cost to performance ratio of any available device.

DESCRIPTION

Designed for cost-effective, high-performance wireless transfer of analog or serial digital data, the HP-Series offers multiple user selectable channels in the popular 902-928MHz band. In the US this band is ideal for a wide variety of wireless applications. To assure reliable performance, the modules employ FM/FSK modulation and an advanced microprocessor-controlled synthesized architecture. For digital applications the HP-series can be directly interfaced with any microcontroller, encoder/decoder, or UART for serial data transfer at rates to 50Kbps. The modules are also capable of transmitting analog information such as voice or analog frequencies within a 50Hz-25Khz range. Other features include CTS, RSSI, and power-down functions. Like all Linx modules, the HP-Series requires no tuning or external components *(except an antenna)*.

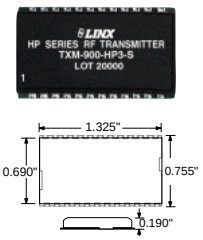
PACKAGE OUTLINES

TXM-900-HP3-P

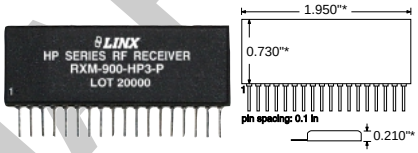


* = Preliminary measurements

TXM-900-HP3-S

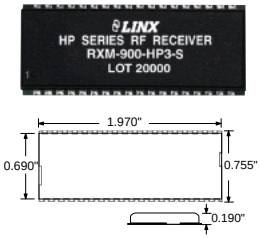


RXM-900-HP3-P



* = Preliminary measurements

RXM-900-HP3-S



ORDERING INFORMATION

PART #	DESCRIPTION
MDEV-900-HP3	HP3 Development Kit
TXM-900-HP3-PPO	Transmitter Pinned SIP Package - 8 Parallel Ch. Sel.
TXM-900-HP3-PPS	Transmitter Pinned SIP Package - 8 Parallel/120 Serial Ch. Sel.
TXM-900-HP3-SPO	Transmitter SMD Package - 8 Parallel Ch. Sel.
TXM-900-HP3-SPS	Transmitter SMD Package - 8 Parallel/120 Serial Ch. Sel.
RXM-900-HP3-PPO	Receiver - Pinned SIP Package - 8 Parallel Ch. Sel.
RXM-900-HP3-PPS	Receiver - Pinned SIP Package - 8 Parallel/120 Serial Ch. Sel.
RXM-900-HP3-SPO	Receiver - SMD Package - 8 Parallel Ch. Sel.
RXM-900-HP3-SPS	Receiver - SMD Package - 8 Parallel/120 Serial Ch. Sel.

APPLICATIONS

Ideally suited to a variety of wireless applications including:

- **Wireless Data Transfer**
- **Process Monitoring**
- **Home/Industrial Automation**
- **Keyless Entry**
- **Remote Control**
- **Fire/Security Alarms**
- **Wireless Networks**
- **Remote Status/ Position Sensing**
- **Telemetry**
- **RS-232/485 Data Links**

SPECIFICATIONS

TXM-900-HP3

Parameter	Min.	Typical	Max.	Units
Modulation Method	Frequency Shift Keying FSK (Digital) Frequency Modulation FM (Analog)			
Transmission Frequencies		902 – 928		MHz
Channels	8 Parallel/120 Serially Selectable Channels			
Supply voltage	2.7	–	13	VDC
Supply current		15	17	mA
Output power into 50Ω	-3	0	+4	dBm
Overall frequency accuracy		±50KHz		
Data input low	0		0.4	volts
Data input high	2.7		5	volts
Operating temp. range		TBD		°C
Analog frequency range	50 Hz - 25 KHz			
Data rate	300-50,000 Bits/Sec			
Antenna	50Ω 1/4-Wave			
Package	SIP or SMD Style			

RXM-900-HP3

Parameter	Min.	Typical	Max.	Units
Receiver type	Synthesized Double Conversion Superhet			
Reception Frequencies		902 – 928		MHz
Channels	8 Parallel/120 Serially Selectable Channels			
Supply voltage	2.7	–	13	VDC
Supply current	16	18	20	mA
Sensitivity	-92	-97	-100	dBm
Max. RF input			0	dBm
Data output low	0.0		0.5	volts
Data output high	V_{CC}-.7		V_{CC}	volts
Operating temp. range		TBD		°C
Analog frequency range	50 Hz - 25 KHz			
Data rate	300-50,000 Bits/Sec			
Antenna	50Ω 1/4-Wave			
Package	SIP or SMD Style			

PRELIMINARY

This data sheet contains information of a preliminary nature. Recipient understands any or all of the above specifications are subject to change without notice and proceeds with integration at own risk.