



# DATA SHEET

## ULTRA-COMPACT LOW-COST LC-SERIES RF DATA MODULES

TXM-\* \* \*-LC  
RXM-\* \* \*-LC  
(\*\*\* = 315, 418, 433 MHz)

### FEATURES

- Complete RF TX/RX solution**  
No external components required (except antenna).  
Easy integration and no production tuning.
- Ultra-compact size**  
9.5mm x 13mm transmitter, 14.9mm x 21.2mm receiver  
Auto-Place compatible SMD packaging.
- Low-cost in volume production quantities**  
Advanced MCHM design allows unmatched cost-to-performance ratio.
- High-performance SAW-based architecture**  
>300-ft. range, 5,000 bps max. data rate.
- Direct interface**  
Logic level I/O. Interface directly to micro-processors, encoder/decoder and rolling code chips.
- Ultra-low power consumption**  
Low voltage capability and minimal power consumption are ideally suited for battery powered-devices.

### DESCRIPTION

At last a cost-effective single-chip, wireless solution. The ultra-compact Linx LC Series is designed for volume OEM use in applications where low power consumption and affordability are primary concerns. The modules utilize a highly stable SAW architecture, ensuring easy design integration even for engineers lacking previous RF experience.

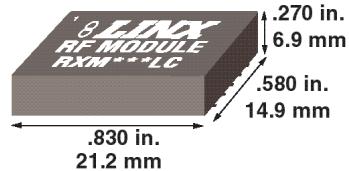
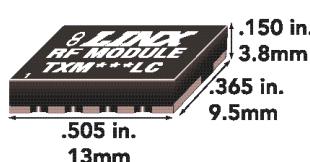
### SPECIFICATIONS

#### TXM-\* \* \*-LC

Parameter	Min.	Typical	Max.	Units
Modulation Method	SAW Based CPCA AM (pulsed carrier)			
Supply voltage	2.7	3.0	5.2	VDC
Supply current (Avg. @50%DC)		1.5		mA
Supply Current (Continuous Carrier)		3.0	6.0	mA
Stand-by current (Logic Low)			1.5	µA
Output power into 50	-4	0	+4	dBm
Overall frequency accuracy	-75		+75	KHz
Data input low	0		0.4	volts
Data input high	2.5		V <sub>CC</sub>	volts
Operating temp. range	-30		+70	°C
Harmonic radiation	Meets all FCC Part 15			
Max. data rate	5 Kbps			
Antenna	External 1/4 wave, whip, helical or trace			
Package	SMD			
Available frequencies	315MHz, 418MHz, 433.92MHz			

### PACKAGE OUTLINES

#### TXM-\* \* \*-LC



Actual Size

### ORDERING INFORMATION

PART #	DESCRIPTION
EVAL-***-LC	Basic Evaluation Kit
MDEV-***-LC	Master Development Kit
TXM-315-LC	TRANSMITTER 315 MHZ
TXM-418-LC	TRANSMITTER 418 MHZ
TXM-433-LC	TRANSMITTER 433 MHZ
RXM-315-LC	RECEIVER 315 MHZ
RXM-418-LC	RECEIVER 418 MHZ
RXM-433-LC	RECEIVER 433 MHZ

\*\*\* = Desired frequency (315, 418, 433 MHz)

### APPLICATIONS

#### Ideally suited to a variety of remote control/ monitoring applications:

- Remote control/status
- Keyless entry
- Home/industrial automation
- Garage/gate openers
- Lighting control
- Fire/security alarms
- Personal assistance / paging devices
- Periodic data transfer
- Wire elimination
- Long-range RFID
- Remote monitoring

#### RXM-\* \* \*-LC

Parameter	Min.	Typical	Max.	Units
Receiver type	SAW Based Superhet			
Supply voltage	2.7	3.0	5.2	VDC
Supply current 1	4.0	6.0	8.0	mA
Channel Width			280	kHz
Sensitivity @BER 10 <sup>-5</sup>	-92	-95	-100	dBm
Max. RF input			0	dBm
Data output low	0.0		0.2	volts
Data output high <sup>2</sup>	V <sub>CC</sub> -0.3		V <sub>CC</sub>	volts
Operating temp. range	-30		+70	°C
Initial settling time	5	7	10	µs
Data rate	5 Kbps			
Spurious radiation	Meets all FCC Part 15			
Antenna	External 1/4 wave, whip, helical or trace			
Available frequencies	315MHz, 418MHz, 433.92MHz			

Revised 6/6/00

For additional information: Linx Technologies 1-800-736-6677

Recipient understands any or all of the above specifications are subject to change without notice and proceeds with integration at own risk.