

# LC and LR Transmitter Module Comparison

Linx Technologies' new LR Series transmitter offers more stable performance over various antenna loads and a higher data rate in the same package as the LC Series transmitter, but the pin-out is slightly different. Pin 4 is the Level Adjust pin for both modules, but this gets connected to ground on the LC and to Vcc on the LR. Pin 8 is ground on the LC and is Power Down for the LR and should be connected to Vcc to activate the module. All other pins are the same for both modules. For data sheets and user manuals, please see the Linx website at [www.linxtechnologies.com](http://www.linxtechnologies.com).

## Specifications Comparison Chart

Parameter	LC			LR		
	Min	Typ	Max	Min	Typ	Max
Supply Voltage (V)	2.7	—	5.2	2.1	3.0	3.6
Supply Current (mA) †						
50% Duty Cycle	—	1.5	—	—	3.4	—
Logic High	—	3	6	—	5.1	—
Logic Low	—	0	—	—	1.8	—
Sleep Current (µA)	—	—	1.5	—	0.005	—
Transmit Frequency Range (MHz)						
TXM-315-L*	—	315	—	—	315	—
TXM-418-L*	—	418	—	—	418	—
TXM-433-L*	—	433.92	—	—	433.92	—
Data Bandwidth (bps)	100	—	5,000	DC	—	10,000
Center Frequency Accuracy (kHz)	-75	—	+75	-50	—	+50
Output Power (dBm) †	-4	0	+4	-4	0	+4
Harmonic Emissions (dBc)	—	—	-36	—	—	-36
Output Power Control Range (dBm)	-7	—	0	-80	—	+10
Modulation Delay (µSec)	—	30	—	—	—	0.03
Operating Temperature Range (°C)	-30	—	+70	-40	—	+85

† LC = 430Ω resistor on LADJ, LR = 750Ω resistor on LADJ

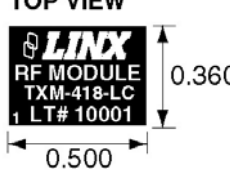
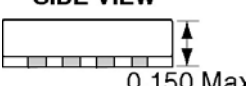
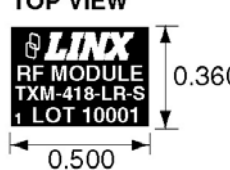
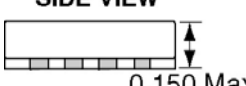
## Pin-out Comparison

TXM-xxx-LC	
1	GND
2	DATA
3	GND
4	LADJ/GND ANT
5	ANT
6	GND
7	VCC
8	GND

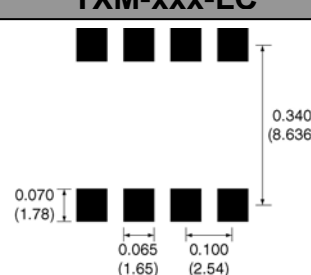
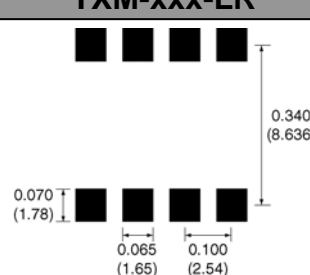
  

TXM-xxx-LR	
1	GND
2	DATA
3	GND
4	LADJ/VCC ANT
5	ANT
6	GND
7	VCC
8	PDN

## Package Comparison

TXM-xxx-LC	TXM-xxx-LR
<p><b>TOP VIEW</b></p>  <p>0.360</p> <p>0.500</p> <p><b>SIDE VIEW</b></p>  <p>0.150 Max.</p>	<p><b>TOP VIEW</b></p>  <p>0.360</p> <p>0.500</p> <p><b>SIDE VIEW</b></p>  <p>0.150 Max.</p>

## PCB Footprint

TXM-xxx-LC	TXM-xxx-LR
 <p>0.070 (1.78)</p> <p>0.065 (1.65)</p> <p>0.100 (2.54)</p> <p>0.340 (8.636)</p>	 <p>0.070 (1.78)</p> <p>0.065 (1.65)</p> <p>0.100 (2.54)</p> <p>0.340 (8.636)</p>

## LR Series Part Numbers

PART #	DESCRIPTION
TXM-315-LR	Transmitter 315MHz
TXM-418-LR	Transmitter 418MHz
TXM-433-LR	Transmitter 433MHz

