



**FM Series  
Evaluation Module  
User's Guide**

**Wireless made simple<sup>®</sup>**



**Warning:** Some customers may want Linx radio frequency (“RF”) products to control machinery or devices remotely, including machinery or devices that can cause death, bodily injuries, and/or property damage if improperly or inadvertently triggered, particularly in industrial settings or other applications implicating life-safety concerns (“Life and Property Safety Situations”).

**NO OEM LINX REMOTE CONTROL OR FUNCTION MODULE SHOULD EVER BE USED IN LIFE AND PROPERTY SAFETY SITUATIONS.**

No OEM Linx Remote Control or Function Module should be modified for Life and Property Safety Situations. Such modification cannot provide sufficient safety and will void the product’s regulatory certification and warranty.

Customers may use our (non-Function) Modules, Antenna and Connectors as part of other systems in Life Safety Situations, but only with necessary and industry appropriate redundancies and in compliance with applicable safety standards, including without limitation, ANSI and NFPA standards. It is solely the responsibility of any Linx customer who uses one or more of these products to incorporate appropriate redundancies and safety standards for the Life and Property Safety Situation application.

**Do not use this or any Linx product to trigger an action directly from the data line or RSSI lines without a protocol or encoder/decoder to validate the data.** Without validation, any signal from another unrelated transmitter in the environment received by the module could inadvertently trigger the action.

**All RF products are susceptible to RF interference that can prevent communication.** RF products without frequency agility or hopping implemented are more subject to interference. This module does not have a frequency hopping protocol built in.

**Do not use any Linx product over the limits in this data guide.** Excessive voltage or extended operation at the maximum voltage could cause product failure. Exceeding the reflow temperature profile could cause product failure which is not immediately evident.

**Do not make any physical or electrical modifications to any Linx product.** This will void the warranty and regulatory and UL certifications and may cause product failure which is not immediately evident.



## Ordering Information

Ordering Information	
Part Number	Description
EVM-GPS-FM	FM Series Evaluation Module
RXM-GPS-FM	FM Series GPS Receiver Module
MDEV-GPS-FM	FM Series GPS Receiver Master Development System

Figure 2: Ordering Information

## Electrical Specifications

FM Series GPS Receiver Specifications						
Parameter	Symbol	Min.	Typ.	Max.	Units	Notes
Power Supply						
Operating Voltage	$V_{CC}$	3.0	3.3	4.3	VDC	
Supply Current	$I_{CC}$					
Peak				66	mA	1
Acquisition			14		mA	1
Tracking			12		mA	1
Standby			0.150		mA	1
Backup Battery Voltage	$V_{BAT}$	2.0		4.3	VDC	
Backup Battery Current	$I_{BAT}$		6		$\mu$ A	2
VOUT Output Voltage	$V_{OUT}$	2.7	2.8	2.9	VDC	
VOUT Output Current	$I_{OUT}$			30	mA	1
Antenna Port						
RF Impedance	$R_{IN}$		50		$\Omega$	
ENVIRONMENTAL						
Operating Temperature Range		-40		+85	$^{\circ}$ C	
Storage Temperature Range		-40		+85	$^{\circ}$ C	
1. $V_{CC} = 3.3V$ , without active antenna, position fix is available 2. $V_{CC} = 0V$						

Figure 3: Electrical Specifications



**Warning:** This product incorporates numerous static-sensitive components. Always wear an ESD wrist strap and observe proper ESD handling procedures when working with this device. Failure to observe this precaution may result in module damage or failure.



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