

Product Notification		Date December 12, 2016
Product	Digi XBee 868LP Modules	
Notice Number	RF161212	

<input type="checkbox"/> Technical Requirement	<input type="checkbox"/> Product Transition
<input type="checkbox"/> Customer Requirement	<input type="checkbox"/> Product Discontinuation
<input type="checkbox"/> Quality Improvement	<input type="checkbox"/> Product Enhancement
<input type="checkbox"/> Change of Production Location	<input type="checkbox"/> Quality Issue
<input type="checkbox"/> New Product Introduction	<input checked="" type="checkbox"/> Other Product Issue

Summary of Issue	Digi has recently learned that under certain circumstances, the Digi XBee 868LP module may experience significant performance issues when deployed near cellular LTE transmitters operating at 800MHz (Band 20) in Europe.
Detail	<p>This situation appears to occur when XBee 868LP modules are deployed within close proximity of a LTE transmitter (typically within 200m). The elevated out-of-band noise generated by the 800MHz LTE transmitters cause the Listen-Before-Talk threshold on the 868LP to be exceeded and prevents the module from transmitting on any channel.</p> <p>The XBee 868LP module is fully compliant with European regulatory standards for the 868MHz band. The performance degradation is not directly caused by any flaw in the XBee design, but is the result of interfering RF energy from LTE transmitters.</p>
Recommendation	Where deployment flexibility exists, the 868LP radio should be placed where the impinging RF energy can be reduced, ideally at least 200 meters from any LTE transmitters. Additionally, users employing a high gain antenna should check their antenna orientation to optimize performance.
Resolution	Digi is actively working on an updated 868MHz module design that will effectively filter out this impinging LTE noise. We expect this updated module to be available as soon as May 2017, and are actively working to improve on that date.
Geography	Europe

Product Information	https://www.digi.com/products/xbee-rf-solutions/modules/xbee-868lp	
Affected Part Numbers	Description	Part Number
	XBee 868LP Development Kit	XK8-DMS-0
	XBee 868LP 32K Programmable Development Kit	XK8-DMSB0
	XBee 868LP RF pad Antenna 80kbps	XB8-DMRS-002
	XBee 868LP U.FL Antenna 80kbps	XB8-DMUS-002
	XBee 868LP PCB Antenna 10kbps	XB8-DPPS-001
	XBee 868LP RF pad Antenna 10kbps	XB8-DPRS-001
	XBee 868LP U.FL Antenna 10kbps	XB8-DPUS-001
	XBee DigiMesh 868LP RF Pad Antenna 80Kbps, 32K Programmable	XB8-DMRSB002
	XBee DigiMesh 868LP U.FL Antenna 80Kbps, 32K Programmable	XB8-DMUSB002

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