

# RFM 802.15.4, FHSS and 802.11



RFM offers a complete line of spread spectrum wireless products for industrial and factory applications. Using both patented frequency hopping technology and open-standard direct sequence technologies, these products fall in two categories: ready-to-use devices for systems integration, and design-in OEM modules for custom applications.

## 802.15.4 ZIGBEE PRO MODULES

RFM's ZPM3750 module is a standards-based wireless transceiver designed for Smart Energy and other short range wireless markets that require low power consumption, high transmit power (20dBm typical) and high receiver sensitivity (-103dBm). The ZPM3750 is based upon the IEEE 802.15.4 wireless network specification and includes the ZigBee PRO stack. The module can be used to develop applications supporting the ZigBee PRO Smart Energy and Home Automation application profiles. The ZPM3750 module operates in the 2.4GHz unlicensed ISM frequency band for worldwide deployment.

### Contains:

- (2) ZPM3750 development boards
- (2) USB and 2 serial cables
- 9V batteries and wall-mount power supplies
- Antennas and RF cables
- Program CD with software and manuals
- Quick Start Guide



MOUSER STOCK NO.	RFM Part No.	Fig.	Description	Transmit Power	Channels	Data Rate	Price Each	
							1	100
<a href="#">725-ZPM3570-C</a>	ZPM3570-C	A	2.4GHz DSSS 802.15.4	100mW	-	-	31.00	26.82
<a href="#">725-ZPM3570-E</a>	ZPM3570-E	A	2.4GHz DSSS 802.15.4	100mW	-	-	31.00	26.82
<b>Development Kits</b>								
<a href="#">725-ZPM3570DK</a>	ZPM3570DK	A	2.4GHz DSSS 802.15.4 Dev. Kit	100mW	-	250 kb/s	174.12	-

## 802.15.4 PRODUCTS

RFM's LPR2430 Series of 802.15.4 2.4GHz modules is comprised of the low-power LPR2430/LPR2430A and the extended range LPR2430ER/LPR2430ERA. The RFM LPR2430 Series modules are easy to integrate and provide robust wireless communications in applications where meshing is not needed or desired.

MOUSER STOCK NO.	RFM Part No.	Fig.	Description	Transmit Power (mW)	Ch.	RF Data Rate (kbps)	Price Each	
							1	100
<a href="#">725-LPR2430</a>	LPR2430	B	2.4GHz Transceiver Module, Low-Power	1	16	250	22.53	22.16
<a href="#">725-LPR2430A</a>	LPR2430A	-	2.4GHz Transceiver Module, Low-Power, w/Chip Antenna	1	16	250	23.18	22.79
<a href="#">725-LPR2430ER</a>	LPR2430ER	-	2.4GHz Transceiver Module, Extended Range	10-100	15	250	36.00	33.75
<a href="#">725-LPR2430ERA</a>	LPR2430ERA	-	2.4GHz Transceiver Module, Extended Range, w/Chip Antenna	10-100	15	250	37.50	35.50
<b>Development Kits</b>								
<a href="#">725-LPR2430DK</a>	LPR2430DK	-	2.4GHz 802.15.4 Development Kit for LPR2430 Transceiver Module	1	16	250	299.00	-
<a href="#">725-LPR2430ADK</a>	LPR2430ADK	-	2.4GHz 802.15.4 Development Kit for LPR2430A Transceiver Module	1	16	250	299.00	-
<a href="#">725-LPR2430ERDK</a>	LPR2430ERDK	-	2.4GHz 802.15.4 Development Kit for LPR2430ER Transceiver Module	10-100	15	250	299.00	-
<a href="#">725-LPR2430ERADK</a>	LPR2430ERADK	-	2.4GHz 802.15.4 Development Kit for LPR2430ERA Transceiver Module	10-100	15	250	299.00	-

## FREQUENCY HOPPING SPREAD SPECTRUM PRODUCTS

RFM FHSS transceiver modules are based on RFM proprietary technology to ensure secure, error-free delivery of data that is desirable in industrial and factory environments.

MOUSER STOCK NO.	RFM Part No.	Fig.	Description	Transmit Power	Ch.	RF Data Rate	Price Each	
							1	100
<a href="#">725-DNT900P</a>	DNT900P	-	900MHz Transceiver Module with I/O	1mW to 1W	50	500kbps	69.00	67.13
<a href="#">725-DNT900C</a>	DNT900C	-	900MHz Transceiver Module with I/O	1mW to 1W	50	500kbps	69.00	67.13
<a href="#">725-DNT24P</a>	DNT24P	C	2.4GHz Transceiver Module with I/O, U.F.L RF Coax Connection	10, 63mW	15, 24	250kbps	30.25	29.80
<a href="#">725-DNT24C</a>	DNT24C	-	2.4GHz Transceiver Module with I/O, U.F.L RF Coax Connection	10, 63mW	15, 24	250kbps	30.25	29.80
<a href="#">725-DNT24PA</a>	DNT24PA	-	2.4GHz Transceiver Module with I/O, Chip Antenna	10, 63mW	15, 24	250kbps	30.25	29.80
<a href="#">725-DNT24CA</a>	DNT24CA	-	2.4GHz Transceiver Module with I/O, Chip Antenna	10, 63mW	15, 24	250kbps	30.25	29.80
<a href="#">725-DNT2400P</a>	DNT2400P	D	2.4GHz Transceiver Module with I/O	100mW	50	38.4-500kbps	69.00	67.13
<a href="#">725-DNT2400C</a>	DNT2400C	D	2.4GHz Transceiver Module with I/O, U.F.L Connector or PCB Pad	1, 10, 63 mW	50	38.4-500kbps	69.00	-
<a href="#">725-WIT2410</a>	WIT2410M4G	-	2.4GHz Transceiver OEM Module with Roaming Capability	10/100mW	75	460.8kbps	259.00	254.00
<a href="#">725-WIT2410S4G</a>	WIT2410S4G	-	2.4GHz Transceiver OEM Module	10/100mW	75	460.8Kbps	259.00	246.38
<a href="#">725-WIT2411D</a>	WIT2411D	-	2.4GHz Transceiver OEM Module	10/100mW	43	1.23Mbps	425.00	416.08
<b>Development Kits</b>								
<a href="#">725-DNT24DK</a>	DNT24DK	-	DNT24P Development Kit, 2 boards, antennas, accessories	10, 63mW	15, 24	250kbps	199.00	190.80
<a href="#">725-DNT900DK</a>	DNT900DK	-	DNT900 Developer Kit	1mW to 1W	50	500kbps	249.00	-
<a href="#">725-DNT2400DK</a>	DNT2400DK	-	DNT2400 Development Kit	100mW	50	38.4-500kbps	249.00	-
<a href="#">725-WIT910DK</a>	WIT910DK	-	WIT910 Development Kit	10/100mW/1W	54	172.8kbps	999.00	-
<a href="#">725-WIT2450DK</a>	WIT2450DK	-	WIT2450 Development Kit	40/100/250mW	95	460.8Kbps	799.00	-
<a href="#">719-WIT2410DK</a>	WIT2410DK	-	WIT2410 Development Kit	10/100mW	75	460.8Kbps	999.00	-

## TRANSCIVER MODULES

The DNT90 FHSS transceiver module provides a low-cost, versatile solution for wireless data communications in the 900MHz ISM band. The DNT90 RF output power can be set at 40 or 158mW. The DNT90 receiver input is protected by low-loss SAW filter, providing an excellent combination of receiver sensitivity and out-of-band interference rejection. The DNT90 module includes analog, digital and serial I/O, providing the flexibility to serve applications ranging from cable replacements to sensor networks. The DNT90 transceiver module is easy to integrate and provides reliable wireless communications up to 5 miles in line-of-sight installations.

MOUSER STOCK NO.	RFM Part No.	Fig.	Description	Transmit Power	Channels	Data Rate	Price Each	
							1	100
<a href="#">725-DNT90P</a>	DNT90P	E	900MHz 150mW Pinned Version	40/158mW	1	100bps	30.25	29.80
<a href="#">725-DNT90C</a>	DNT90C	E	900MHz 150mW SMD version	40/158mW	1	100bps	30.25	29.80
<b>Development Kits</b>								
<a href="#">725-DNT90DK</a>	DNT90DK	E	900MHz 150mW Dev Kit	40/158mW	1	100bps	199.00	190.80

## 802.11 PRODUCTS

RFM's WSN802G is a 2.4GHz IEEE 802.11 g Radio Transceiver Module that enables OEMs to build low-power wireless local area networking (WLAN) and sensor monitoring solutions for the global market. The WSN802G delivers an exceptionally low power profile and long battery life capabilities in a fully functional, certified radio module that is easily interfaced to existing 802.11 b/g infrastructure for a wide variety of sensor monitoring and WLAN applications.

MOUSER STOCK NO.	RFM Part No.	Fig.	Description	Transmit Power	Ch.	Data Rate (Mbps)	Price Each	
							1	100
<a href="#">725-WSN802GP</a>	WSN802GP	F	2.4GHz 802.11g Radio Transceiver Module	10mW	14	1 or 2	39.00	38.00
<a href="#">725-WSN802GC</a>	WSN802GC	F	802.11g Wireless Sensor Network Module - U.F.L Coax Connector	10mW	11	1-11	39.00	-
<a href="#">725-WSN802GCA</a>	WSN802GCA	F	802.11g Wireless Sensor Network Module - Integral Chip Antenna	10mW	11	1-11	39.00	-
<b>Development Kits</b>								
<a href="#">725-WSN802GDK</a>	WSN802GDK	F	2.4GHz 802.11g Development Kit	10mW	14	1 or 2	139.00	-
<a href="#">725-WSN802GDK-A</a>	WSN802GDK-A	F	2.4GHz 802.11g Development Kit with Router	10mW	14	1 or 2	199.00	-

## WIFI/BLUETOOTH COMBO SHORT-RANGE RADIO MODULES

MOUSER STOCK NO.	RFM Part No.	Fig.	Description	Frequency (GHz)	Bluetooth	Data Rate (Mbps)	Price Each			
							1	10	50	100
<a href="#">725-WLS1270-S</a>	WLS1270-S	G	802.11b/g/n module	2.412-2.485	n/a	1-65	29.42	27.27	24.99	23.27
<a href="#">725-WLS1271-S</a>	WLS1271-S	G	802.11b/g/n plus Bluetooth module	2.412-2.486	4.0+EDR, Power Class 1.5 +BLE	1-65	35.31	32.73	29.99	27.93
<a href="#">725-WLS1273-S</a>	WLS1273-S	H	802.11a/b/g/n plus Bluetooth module	2.412-2.487 & 4.920 to 5.824	4.0+EDR, Power Class 1.5 +BLE	1-65	40.91	38.28	35.34	33.20
<b>Development Kits</b>										
<a href="#">725-DR-WLS1270-EV</a>	DR-WLS1270-EV	-	Evaluation Kit for the WLS1270	2.412-2.485	n/a	1-65	576.92	-	-	-
<a href="#">725-DR-WLS1271-EV</a>	DR-WLS1271-EV	-	Evaluation Kit for the WLS1271L	2.412-2.486	4.0+EDR, Power Class 1.5 +BLE	1-65	576.92	-	-	-
<a href="#">725-DR-WLS1273-EV</a>	DR-WLS1273-EV	-	Evaluation Kit for the WLS1273L	2.412-2.487 & 4.920 to 5.824	4.0+EDR, Power Class 1.5 +BLE	1-65	576.90	-	-	-

