

Fig.	Description	Frequency (MHz)	Digi-Key Part No.	1	25	100	Antenna Factor Part No.
16	Ultra-Compact Chip Antenna	2.45GHz	ANT-2.45-CHPCT-ND* ANT-2.45-CHPTR-ND*	1.10	1.00 1241.46/1,500	.97	ANT-2.45-CHP ANT-2.45-CHP
17	Helical Through-Hole Antenna	315 418 433 916	ANT-315-HETH-ND ANT-418-HETH-ND ANT-433-HETH-ND ANT-916-HETH-ND	.64 .64 .64 .64	.55 .55 .55 .55	.49 .49 .49 .49	ANT-315-HETH ANT-418-HETH ANT-433-HETH ANT-916-HETH
18	Helical SMA Antenna	418	ANT-418-HESM-ND	.64	.55	.49	ANT-418-HESM
19	1/4 Wave Whip Right Angle	315 418 433 2.45GHz	ANT-315-CW-RAH-ND ANT-418-CW-RAH-ND ANT-433-CW-RAH-ND ANT-2.4-CW-RAH-RPS-ND	6.15 6.15 6.15 3.54	5.63 5.63 5.63 3.25	4.51 4.51 4.51 2.72	ANT-315-CW-RAH ANT-315-CW-RAH ANT-433-CW-RAH ANT-2.4-CW-RAH-RPS
20	1/4 Wave Right Angle with SMA	2.45GHz	ANT-2.4-CW-RAH-SMA-ND	3.54	3.25	2.78	ANT-2.4-CW-RAH-SMA
21	1/2 Wave Whip RP-SMA	868 916	ANT-868-CW-HW-ND ANT-916-CW-HW-ND	6.16 6.16	5.64 5.64	4.54 4.54	ANT-868-CW-HW ANT-916-CW-HW
22	1/4 Wave Whip RP-SMA	315	ANT-315-CW-HWR-RPS-ND	7.25	6.63	5.55	ANT-315-CW-HWR-RPS
		418	ANT-418-CW-HWR-RPS-ND	7.25	6.63	5.55	ANT-418-CW-HWR-RPS
		433	ANT-433-CW-HWR-RPS-ND	7.25	6.63	5.55	ANT-433-CW-HWR-RPS
	1/2 Wave Whip RP-SMA	868	ANT-868-CW-HWR-RPS-ND	7.25	6.63	5.55	ANT-868-CW-HWR-RPS
		916	ANT-916-CW-HWR-RPS-ND	7.25	6.63	5.55	ANT-916-CW-HWR-RPS
	1/4 Wave Whip SMA	315	ANT-315-CW-HWR-SMA-ND	7.25	6.63	5.55	ANT-315-CW-HWR-SMA
418 433		ANT-418-CW-HWR-SMA-ND ANT-433-CW-HWR-SMA-ND	7.25 7.25	6.63 6.63	5.55 5.55	ANT-418-CW-HWR-SMA ANT-433-CW-HWR-SMA	
23	Permanent Mount 1/4 Wave SMA	868	ANT-868-WRT-SMA-ND	8.87	8.11	7.61	ANT-868-WRT-SMA
		916	ANT-916-WRT-SMA-ND	8.87	8.11	7.61	ANT-916-WRT-SMA
		2.45GHz	ANT-2.4-WRT-SMA-ND	8.87	8.11	7.61	ANT-2.4-WRT-SMA
	Permanent Mount 1/4 Wave RP-SMA	868	ANT-868-WRT-RPS-ND	8.87	8.11	7.61	ANT-868-WRT-RPS
		916	ANT-916-WRT-RPS-ND	8.87	8.11	7.61	ANT-916-WRT-RPS
		2.45GHz	ANT-2.4-WRT-RPS-ND	8.87	8.11	7.61	ANT-2.4-WRT-RPS
Evaluation Kit for CHP Antenna			AEK-2.45-CHP-ND	13.76	—	—	AEK-2.45-CHP

◆ RoHS Compliant • Cut Tape † Tape and Reel

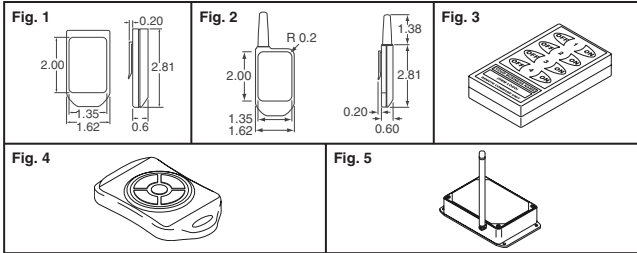
B

OEM Modules

FCC Pre-Certified OEM Products



Dimensions in mm



All units below are pre-approved with the FCC to allow immediate integration and sale in most OEM product.

**Compact Handheld Transmitter:** Compact 8-buttons handheld remote is capable of up to 150 feet transmission range. The keypad and labeling can be modified to meet specific customer requirements. Can create up to 1,024 distinct transmitter-receiver relationships.

**Long-Range Handheld Transmitter:** Compact 8-buttons handheld remote is capable of up to 300+ feet transmission range. The keypad and labeling can be modified to meet specific customer requirements. Can create up to 1,024 distinct transmitter-receiver relationships. External antenna attached.

**Handheld Transmitter:** Compact 8-button handheld remote is capable of 100+ feet transmission ranges. The transmission can be decoded using a standard decoder IC, microcontroller or matching Linx function module. Selectable addressing provides security and allows distinct TX/RX relationships.

**Keypad Transmitter:** This tiny keypad features outstanding range performance and is configured with 1 to 5 buttons for a variety of OEM applications.

**1 to 4 Position Relay Function Module:** Provides 4 latched relay outputs which are capable of switching external AC or DC powered loads up to 5 amps. Selectable addressing.

Fig.	Description	Freq. (MHz)	Digi-Key Part No.	1	25	100	Linx Part No.
1	Compact Handheld Transmitter	418	CMD-HHCP-418-ND	21.34	19.52	17.08	CMD-HHCP-418
		433	CMD-HHCP-433-ND	21.34	19.52	17.08	CMD-HHCP-433
		315	CMD-HHCP-315-MD-ND	22.11	20.22	17.06	CMD-HHCP-315-MD
		418	CMD-HHCP-418-MD-ND	22.11	20.22	17.06	CMD-HHCP-418-MD
		433	CMD-HHCP-433-MD-ND	22.11	20.22	17.06	CMD-HHCP-433-MD
		315	OTX-315-HH-CP8-MS-ND	31.33	28.65	26.86	OTX-315-HH-CP8-MS
2	Long-Range Handheld Transmitter	418	CMD-HHLR-418-ND	23.53	21.52	19.23	CMD-HHLR-418
		433	CMD-HHLR-433-ND	23.53	21.52	19.23	CMD-HHLR-433
		315	CMD-HHLR-315-MD-ND	24.29	22.21	18.74	CMD-HHLR-315-MD
		418	CMD-HHLR-418-MD-ND	24.29	22.21	18.74	CMD-HHLR-418-MD
		433	CMD-HHLR-433-MD-ND	24.29	22.21	18.74	CMD-HHLR-433-MD
		315	OTX-315-HH-LR8-MS-ND	32.91	30.09	28.21	OTX-315-HH-LR8-MS
3	Handheld Transmitter	418	CMD-HHTX-418-ND	23.25	21.26	18.21	CMD-HHTX-418
		433	CMD-HHTX-433-ND	23.25	21.26	18.21	CMD-HHTX-433
		315	CMD-KEY5-315-ND	14.23	13.52	12.40	CMD-KEY5-315
		418	CMD-KEY5-418-ND	14.23	13.52	12.40	CMD-KEY5-418
		433	CMD-KEY5-433-ND	14.23	13.52	12.40	CMD-KEY5-433
		315	OTX-315-HH-KF5-MS-ND	15.54	14.76	14.57	OTX-315-HH-KF5-MS
4	1 to 5 Button FCC Pre-certified Keypad Transmitter	418	OTX-418-HH-KF5-MS-ND	15.54	14.76	14.57	OTX-418-HH-KF5-MS
		433	OTX-433-HH-KF5-MS-ND	15.54	14.76	14.57	OTX-433-HH-KF5-MS
		315	FCTN-RLY4X-315-ND	43.45	39.73	36.27	FCTN-RLY4-315
5	1 to 4 Position Relay Function Module	418	FCTN-RLY4-418-ND	43.45	39.73	36.27	FCTN-RLY4-418
		433	FCTN-RLY4X-433-ND	43.45	39.73	36.27	FCTN-RLY4-433
		315	FCTN-RLY4X-315-ND	43.45	39.73	36.27	FCTN-RLY4-315

◆ RoHS Compliant

Evaluation Kits and Accessories

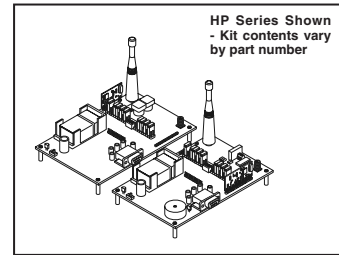
These kits provide the most complete opportunity to evaluate the Linx module series of your choice and then begin the integration of it into your own design.

**Basic Evaluation Kit:**

This kit is a quick way to evaluate the field performance of Linx products. The kit does not allow for the level of testing and interface possible with Master Kits but provides a cost-effective starting point.

**Master Evaluation/Development System Kit:**

The kits not only allow evaluation of the module series you have chosen, but also speed the development of your own design via on-board prototyping area and breakout headers.



HP Series Shown - Kit contents vary by part number

Description	MHz	Digi-Key Part No.	Price Each	Linx Part No.
<b>Basic Evaluation Kits</b>				
SC Series	916	EEVAL-916-SC-P-ND	144.47	EEVAL-916-SC
KH Series	315	EEVAL-315-KH-ND	108.17	EEVAL-315-KH
	433	EEVAL-433-KH-ND	108.17	EEVAL-433-KH
KH2 Series	315	EEVAL-315-KH2-ND	108.17	EEVAL-315-KH2
	418	EEVAL-418-KH2-ND	108.17	EEVAL-418-KH2
	433	EEVAL-433-KH2-ND	108.17	EEVAL-433-KH2
ES Series	916	EEVAL-916-ES-ND	129.95	EEVAL-916-ES
Keypad Series	418	EEVAL-418-KEY5-ND	86.39	EEVAL-418-KEY5
HHCP Series	418	EEVAL-418-HHCP-ND	93.65	EEVAL-418-HHCP
HHLR Series	418	EEVAL-418-HHLR-ND	93.65	EEVAL-418-HHLR
LR Series	315	EEVAL-315-LR-ND	100.91	EEVAL-315-LR
	418	EEVAL-418-LR-ND	100.91	EEVAL-418-LR
	433	EEVAL-433-LR-ND	100.91	EEVAL-433-LR-S
LT Series	315	EEVAL-315-LT-ND	108.17	EEVAL-315-LT
	418	EEVAL-418-LT-ND	108.17	EEVAL-418-LT
LC Series	315	EEVAL-315-LC-ND	100.91	EEVAL-315-LC
	418	EEVAL-418-LC-ND	100.91	EEVAL-418-LC
433	EEVAL-433-LC-ND	100.91	EEVAL-433-LC	
<b>Master Evaluation / Development System Kits</b>				
HP-3 Series	900	MDEV900HP3PPSR23-ND	217.07	MDEV-900-HP3-PPS-RS232
ES Series	916	MDEV-916-ES-ND	217.07	MDEV-916-ES
SC-P Series	916	MDEV-916-SC-P-ND	217.07	MDEV-916-SC-P
SC-S Series	916	MDEV-916-SC-S-ND	217.07	MDEV-916-SC-S
QS Series	—	MDEV-USB-QS-ND	93.65	MDEV-USB-QS
MS Series	315	MDEV-315-HH-KF5-MS-ND	108.86	MDEV-315-HH-KF5-MS
	418	MDEV-418-HH-KF5-MS-ND	108.86	MDEV-418-HH-KF5-MS
	433	MDEV-433-HH-KF5-MS-ND	108.86	MDEV-433-HH-KF5-MS
MS Series	315	MDEV-315-HH-CP8-MS-ND	108.86	MDEV-315-HH-CP8-MS
	418	MDEV-418-HH-CP8-MS-ND	108.86	MDEV-418-HH-CP8-MS
	433	MDEV-433-HH-CP8-MS-ND	108.86	MDEV-433-HH-CP8-MS
MS Series	315	MDEV-315-HH-LR8-MS-ND	108.86	MDEV-315-HH-LR8-MS
	418	MDEV-418-HH-LR8-MS-ND	108.86	MDEV-418-HH-LR8-MS
	433	MDEV-433-HH-LR8-MS-ND	108.86	MDEV-433-HH-LR8-MS
418	MDEV-418-LICAL-MS-ND	180.77	MDEV-LICAL-MS	
<b>Accessories — RoHS Compliant</b>				
CR2032 Coin Battery Holder	—	BAT-HLD-001-ND	.38	BATHLD-001

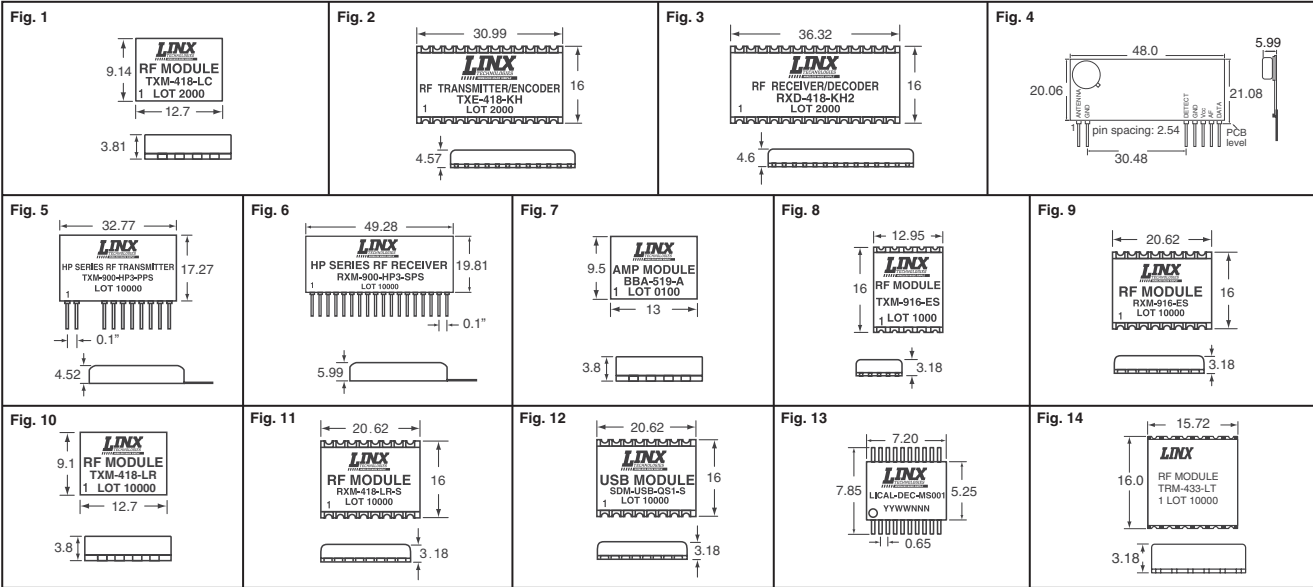
◆ RoHS Compliant

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

Free shipping on orders over £50! All prices are in British pound sterling and include duties.

uk.digikey.com — FREEPHONE: 0-800-587-0991 • 0-800-904-7786 — FREEFAX: 0-800-587-0992 • 0-800-904-7783

(UK091) 527



**B**

**LC Series – Ultra-Compact Low-Cost RF TX Modules:** Operating in the 260 – 470MHz band, these tiny RF modules provide a complete and cost-effective solution for the wireless transfer of serial control and command information over distances in excess of 300 ft.

- 2.7 – 5.2VDC range • 1.5mA average • +3dBm output
- 5Kbps maximum data rate • Low harmonics

**KH Series – Transmitter And Receiver Featuring Integrated Encoder/Decoders:** This series combines the popular LC TX/RX with an integrated encoder/decoder pair. The encoder module accepts up to eight parallel inputs. This allows the direct connection of switches or a microcontroller.

**KH2 Series –** This series is ideally suited for applications such as remote control/command and keyless entry. It combines a high-performance RF receiver with an on-board decoder. When paired with a matching KH Series transmitter/encoder module, OEM transmitter, or LC or LR Series transmitter and Holtek HT640 encoder combination, a highly reliable wireless link is formed, capable of transferring the status of 8 parallel inputs for distances of up to 3,000 ft. Ten tri-state address lines provide 59,049 (3<sup>10</sup>) different addresses.

**RM Series –** Provides a complete TX/RX solution in a compact SIP style module. This series utilizes an advanced SAW based design and FM/FSK modulation and operates in the 260 – 470MHz band.

- Rx: • 4.0 – 9.0VDC range • 14mA average • -103 Typical sensitivity

**HP3 Series – High-Performance, Low-Cost, RF TX/RX Modules:** These modules are designed for the popular 902 – 928MHz band. The modules offer 8 or 256 selectable channels and are capable of transmitting analog and digital information for distances of up to 1000 feet. Available in SIP or SMT package.

**Tx:** • 8 parallel selectable channels on PO series and 8 parallel 120 serial on PS series • Synthesized architecture • 2.7 – 3VDC supply range • Low power (15mA average current); • 0dbm output power • 100Hz – 25kHz analog bandwidth • CTS

**Rx:** • 8 parallel selectable channels on PO series and 8 parallel 120 serial on PS series • Synthesized architecture • 2.7 – 18VDC supply range • Low power (18mA average current; 50µA powerdown) • 50Kbps maximum data rate • 50Hz – 25kHz analog bandwidth • RSSI output • Powerdown control

**BBA Series – Broadband RF Amplifiers:** These amplifiers are well suited to a wide range of amplification and buffering applications including extending the range of Linx's own RF modules (when legally appropriate). The hybrid amps are pre-matched to 50Ω and require no external RF components.

**BBA-322:** • High gain model • 10MHz – 3GHz broadband operation • +20dB small signal gain at 900MHz • Up to +10 (10mW) Linear output power • 3.8dB noise figure • Operates from a single supply

**BBA-519:** • High output model • 10MHz – 4GHz broadband operation • +18dB Small Signal gain at 900MHz • Up to +17 (50mW) Linear output power • 4.8dB noise figure

**ES Series –** Housed in a tiny SMD package, this series utilizes an advanced FM/FSK-based synthesized architecture to provide superior performance and noise immunity when compared to AM/OOK solutions. An outstanding 56Kbps maximum data rate and wide-range analog capability make the ES Series equally at home with digital data or analog sources such as audio. A host of useful features including RSSI, PDN, audio reference, LVL ADJ, low-vol tage detect and a microprocessor clock source are provided. Operates at 916.48MHz which in North America allows an unlimited variety of applications including data and audio links. Audio 20Hz – 28kHz, very low current for long life in battery applications.

**Tx:** • Supply voltage: 2.1V – 4V • Current: 6.5 – 7.5mA • 0dbm output power • Sleep: 90µA

**Rx:** • Supply voltage: 4.5V – 5.5V • Current: 5.5 – 6.5mA • Sleep: 50µA

**LR Series –** This receiver is ideal for the wireless transfer of serial data, control or command information in the 260 – 470MHz band • Links less than 3000 feet will benefit from a more reliable signal • Rx is Footprint compatible with popular LC-S series • 10Kbps data rate • Range in excess of 3000 feet • SMD package • No external components required (except antenna) • Operating voltage down to 2.7V • 5kHz analog BW • -112dbm receiver sensitivity typical • +5.2mA supply current typical

**QS Series –** Allows the rapid addition of USB to virtually any device. Housed in a compact SMD package, the QS Module provides a complete solution for converting between USB and TTL logic output. • Applications include interfacing Linx RF Modules, MCUs, etc., to a USB interface • 4.4 – 6VDC supply • Low current consumption, 26mA • USB Bus or self powered • No external components required (except USB jack)

**MS Series –** The MS Series encoders and decoders are designed for remote control applications. They allow the status of up to 8 buttons or contacts to be securely transferred via a wireless link. The MS Series 24 bit address size makes transmissions highly unique, minimizing the possibility of multiple devices having conflicting addresses.

**Features:** • 8 data lines • Low 2.0V – 5.5V operating voltage • Low supply current (370µA @ 3V) • Ultra low 0.1µA standby current • Selectable baud rates

**MT Series –** The MT Series transcoders are designed for bidirectional remote control applications. Eight status lines can be set up in any combination of inputs and outputs for the transfer of button or contact states.

**Features:** • Bi-directional control • Automatic confirmation • Secure 2<sup>24</sup> possible addresses • 8 status lines • Serial Interface Engine (SIE) • Definable recognition authority

**LT Series –** This transceiver is ideal for the bidirectional wireless transfer of serial data, control, or command information in the favorable 260 – 470MHz band. The transceiver is capable of generating +100Bm into a 50Ω load and achieves an outstanding typical sensitivity of -112dBm.

**Features:** • Long range • Data rates to 10,000bps • No external RF components required • Low power consumption • RSSI and power-down functions

Fig.	Description	Freq. (MHz)	Digi-Key Part No.	1	Price Each	25	100	Linx Part No.		
<b>LC Series – RoHS Compliant</b>										
1	Transmitter	315	TXM-315-LC -ND	5.01	4.58	4.07		TXM-315-LC		
		418	TXM-418-LC -ND	5.01	4.58	4.07		TXM-418-LC		
		433	TXM-433-LC -ND	5.01	4.58	4.07		TXM-433-LC		
<b>KH/KH2 Series</b>										
2	Transmitter/Encoder	315	TXE-315-KH-ND	7.25	6.63	5.67		TXE-315-KH		
		315	TXE-315-KH2-ND	7.25	6.63	5.67		TXE-315-KH2		
		433	TXE-433-KH2-ND	7.25	6.63	5.67		TXE-433-KH2		
3	Receiver/Decoder	418	RXD-418-KH-ND	11.57	10.58	9.26		RXD-418-KH		
		315	RXD-315-KH2-ND	11.57	10.58	9.25		RXD-315-KH2		
		418	RXD-418-KH2-ND	11.57	10.58	9.25		RXD-418-KH2		
3	Receiver/Decoder	433	RXD-433-KH2-ND	11.57	10.58	8.86		RXD-433-KH2		
		<b>RM Series</b>								
		4	Receiver	418	RXM-418-RM-ND	26.62	24.34	20.55		RXM-418-RM
<b>HP3 Series</b>										
5	Transmitter 8/120 Channel	900	TXM-900-HP3-PPS-ND	22.02	20.14	17.50		TXM-900-HP3-PPS		
6	Receiver 8 Channel	900	RXM-900-HP3-PPO -ND	31.51	28.81	22.13		RXM-900-HP3-PPO		
		900	RXM-900-HP3-PPS-ND	32.66	29.86	22.85		RXM-900-HP3-PPS		
<b>BBA Series</b>										
7	Hi-Gain Broadband RF Amp.	10-3000	BBA-322-A-ND	10.74	10.21	9.81		BBA-322-A		
		10-4000	BBA-519-A-ND	10.89	10.35	10.13		BBA-519-A		
<b>ES Series – RoHS Compliant</b>										
8	Transmitter	916	TXM-916-ES-ND	10.05	9.19	7.89		TXM-916-ES		
9	Receiver	916	RXM-916-ES-ND	12.43	11.37	9.38		RXM-916-ES		
<b>LR Series</b>										
10	Transmitter	315	TXM-315-LR-ND	5.42	4.95	4.32		TXM-315-LR		
		418	TXM-418-LR-ND	5.42	4.95	4.32		TXM-418-LR		
		433	TXM-433-LR-ND	5.42	4.95	4.32		TXM-433-LR		
11	Receiver	315	RXM-315-LR-ND	9.84	9.01	7.12		RXM-315-LR		
		418	RXM-418-LR-ND	9.84	9.01	7.12		RXM-418-LR		
		433	RXM-433-LR -ND	9.84	9.01	7.12		RXM-433-LR		
<b>QS Series</b>										
12	USB Module	—	SDM-USB-QS-S-ND	10.09	9.23	8.16		SDM-USB-QS-S		
<b>MS Series – RoHS Compliant</b>										
13	Encoder Decoder	—	LICAL-ENC-MS001-ND	2.98	2.72	2.30		LICAL-ENC-MS001		
		—	LICAL-DEC-MS001-ND	2.98	2.72	2.30		LICAL-DEC-MS001		
<b>MT Series – RoHS Compliant</b>										
13	Transcoder	—	LICAL-TRC-MTCT-ND†	3.01	2.76	2.67		LICAL-TRC-MT		
		—	LICAL-TRC-MTTR-ND‡	3661.48/1,600				LICAL-TRC-MT		
<b>MT Series Development Kit – RoHS Compliant</b>										
—	Master Development Kit	—	MDEV-LICAL-MT-ND	217.07	—	—		MDEV-LICAL-MT		
<b>LS Series – RoHS Compliant</b>										
—	Encoder - 8 Dip Decoder - 8 Dip	—	LICAL-ENC-LS001-ND	2.83	2.60	2.19		LICAL-ENC-LS001		
		—	LICAL-DEC-LS001-ND	2.83	2.60	2.19		LICAL-DEC-LS001		
<b>LT Series – RoHS Compliant</b>										
14	Transceiver	315	TRM-315-LT-ND	12.45	11.39	10.68		TRM-315-LT		
		418	TRM-418-LT-ND	12.45	11.39	10.68		TRM-418-LT		
		433	TRM-433-LT-ND	12.45	11.39	10.68		TRM-433-LT		

♦ RoHS Compliant † Cut Tape ‡ Tape and Reel

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**  
528 (UK091) uk.digikey.com — FREEPHONE: 0-800-587-0991 • 0-800-904-7786 — FREEFAX: 0-800-587-0992 • 0-800-904-7783



## RF Receivers and RFID Transceivers

**RF Receivers:** Features: • Single superhet architecture for low external component count • FSK for digital data and FM reception • FM/FSK demodulation with phase-coincidence demodulator • For Analog Signal transmission • Low current consumption in active mode and very low standby current • Switchable LNA gain for improved dynamic range • RSSI allows signal strength indication and ASK detection **Operating Temperature Range:** -40°C - 85°C **MLX71120 and MLX71121:** **Operating Temperature Range:** -40°C - 125°C

**RFID Transceivers:** **MLX90121 and MLX12115:** Features: • Low external component count **Operating Temperature Range:** -40°C - 85°C **MLX90109:** Features: • Addressing 100kHz - 150kHz frequency range transponder • Biphasic and Manchester ASK • ON/OFF keying modulation **Operating Temperature Range:** -40°C - 85°C

Protocol	Package	Frequency (MHz)	Digi-Key Part No.	Price Each			Tape and Reel†	
				1	10	25	Qty.	Pricing
<b>RF Receivers / Transceiver</b>								
FSK/FM/ASK	32-LOFP	315 - 433	TH71101ENE-ND	7.78	5.84	4.50	—	—
	32-LOFP	315 - 433	TH71102ENE-ND	8.62	7.84	4.99	—	—
	32-LOFP	868 - 915	TH71111ENE-ND	8.62	6.48	4.99	—	—
	32-LOFP	868 - 915	TH71112ENE-ND	8.62	6.48	4.99	—	—
	32-LOFP	300 - 930	TH7122ENE-ND	10.70	8.04	6.18	2,000	2748.82/M
	32-QFN	300 - 930	MLX7120KLO-ND	9.11	6.85	5.27	—	—
32-QFN	300 - 930	MLX7121KLO-ND	9.55	7.18	5.53	—	—	
<b>RFID Transceivers — RoHS Compliant</b>								
—	20-SSOP	13.56	MLX90121EFRCT-ND	12.12	6.84	5.76	1,500	2739.20/M
—	20-SSOP	13.56	MLX12115EFRCT-ND	15.30	8.64	7.26	1,500	3457.94/M
—	8-SOIC	125kHz	MLX90109EDCCT-ND	7.97	4.50	3.79	2,600	1593.77/M

† RoHS Compliant ‡ For Tape and Reel part number, change -CT-ND to -TR-ND

## RF Receiver and RFID Transceiver Evaluation Boards and Development Kits

Description	Digi-Key Part No.	Price Each
<b>Evaluation Boards and Development Kits for RF/RFID</b>		
Evaluation Board for TH71101 Receiver	EV871101B-315FSKC-ND	120.03
Evaluation Board for TH71101 Receiver	EV871101B-433FSKC-ND	120.03
Evaluation Board for TH71102 Receiver	EV871102B-315FSKC-ND	116.16
Evaluation Board for TH71102 Receiver	EV871102B-418FSKC-ND	116.16
Evaluation Board for TH71102 Receiver	EV871102B-433FSKC-ND	116.16
Evaluation Board for TH71111 Receiver	EV871111B-915FSKC-ND	116.16
Evaluation Board for TH71112 Receiver	EV871112B-868FSKC-ND	116.16
Evaluation Board for TH71112 Receiver	EV871112B-915FSKC-ND	116.16
Evaluation Board for TH7122ENE Transceiver	EV87122-433-FSK-C-ND	190.58
Evaluation Board for MLX90121	EV890121-ND	108.42
Development Kit for MLX90121	DVK90121-ND	333.23
Evaluation Board for MLX90109	EV890109-ND	54.70
Development Kit for MLX90109	DVK90109-ND	333.23
Kit for Door Access Demonstrator	DEM090121DA-ND	108.42
Kit for Long Range Reader Demonstrator	DEM090121LR-ND	246.84



## MeshNetics ZigBee™ Modules and Development Kits



MeshNetics is a creator of easy-to-integrate 900 MHz and 2.4GHz 802.15.4/ZigBee wireless RF modules and free mesh networking software, used by OEMs and system integrators to add wireless connectivity to their products and solutions. MeshNetics RF modules feature industry-leading range performance with a link budget of up to 124 dB, long battery

life and ultra-small footprint. MeshNetics products are used to create reliable, self-healing wireless networks that enable solutions in building automation, energy management and efficiency, HVAC, AMR, predictive maintenance, asset tracking and other application areas.

Size (mm)	Supply Voltage (V)	Power Consumption Power Save (µA)	Power Consumption TX/RX (mA)	Frequency (MHz)	Max. Output Power (dBm)	Receiver Sensitivity (dBm)	Antenna Type	Digi-Key Part No.	Price Each 1 10	Digi-Key Part No.	Tape and Reel Pricing 500	MeshNetics Part No.	
<b>ZigBit™ Modules</b>													
18.8 x 13.5	1.8 - 3.6	6	18/19	2400	+3	-101	Balance RF Output Pin	758-1000-1-ND†	16.63	16.27	758-1000-2-ND	11107.80	MNZB-24-B0
24 x 13.5	1.8 - 3.6	6	18/19	2400	+3	-101	Balanced Dual Chip Ceramic	758-1001-1-ND†	18.80	18.44	758-1001-2-ND	12741.29	MNZB-24-A2
38 x 13.5	3.0 - 3.6	6	50/23	2400	+20	-104	U.FL Connector	758-1011-1-ND†	27.23	26.87	758-1011-2-ND	12704.99	MNZB-A24-UFL
38 x 13.5	3.0 - 3.6	6	50/23	2400	+20	-104	Unbalanced RF Pin	758-1012-1-ND†	26.79	26.43	758-1012-2-ND	12487.22	MNZB-A24-U0
<b>Development Kits and Boards</b>													
MeshBean Board with PCB Antenna, Sensors (Light and Temperature).....								758-1002-ND	90.75	—	—	—	MNZB-EVB-24-B0
MeshBean Board with Chip Antenna, Sensors (Light and Temperature).....								758-1003-ND	90.75	—	—	—	MNZB-EVB-24-A2
MeshBean Board with SMA Connector, Sensors (Light and Temperature).....								758-1004-ND	90.75	—	—	—	MNZB-EVB-24-SMA
Development Kit for ZigBit Modules, Includes: 3 MeshBean Boards, Software and Cables, 1-year Manufacturer Support.....								758-1005-ND	653.40	—	—	—	MNZB-DKC-24
Development Kit for ZigBit Modules, Includes: 3 MeshBean Boards, Software and Cables, 45-day Manufacturer Support.....								758-1006-ND	290.40	—	—	—	MNZB-DKL-24
Development Kit for ZigBit Amp, Includes: 3 MeshBean Boards, Software and Cables, 1-year Manufacturer Support.....								758-1014-ND	653.40	—	—	—	MNZB-DKC-A24
Development Kit for ZigBit Amp, Includes: 3 MeshBean Boards, Software and Cables, 45-day Manufacturer Support.....								758-1015-ND	290.40	—	—	—	MNZB-DKL-A24
MeshBean Board with RPSMA Connectors, ZigBit Amp (U.FL version), Sensors (Light and Temperature).....								758-1013-ND	108.90	—	—	—	MNZB-EVB-A24-UFL

† Cut Tape

## MICREL QwikRadio™ RF Receivers



Description	Package	Digi-Key Part No.	1	Price Each 25 100	Micrel Part No.
QwikRadio Receiver/Data Demod	14-SOIC	576-1330-1-ND†	3.19	2.55	1.99
QwikRadio Receiver/Data Demod	14-SOIC	576-1330-2-ND‡	—	2.96/2,500	—
QwikRadio Receiver/Data Demod	14-Dip	576-1331-ND	3.83	3.06	2.38
QwikRadio Receiver/Data Demod	14-SOIC	576-1336-ND	3.07	2.46	1.92
QwikRadio Receiver/Data Demod	14-Dip	576-1337-ND	3.70	2.96	2.30
QwikRadio 115kbps, 800MHz - 1GHz UHF Receiver	14-SOIC	576-1333-ND	3.64	2.92	2.47
QwikRadio LP UHF Receiver	8-SOIC	576-1334-ND	3.30	2.64	2.06
QwikRadio LP UHF Receiver	16-SOIC	576-1335-ND	3.30	2.64	2.06
QwikRadio LP UHF Receiver	8-SOIC	576-1962-5-ND	3.30	2.64	2.06
QwikRadio ASK Receiver 300 - 440MHz	16-SOIC	576-1332-ND	3.30	2.64	2.06
QwikRadio Sweep-Mode Receiver 300 - 440MHz	8-SOIC	576-1961-5-ND	2.34	1.87	1.46
QwikRadio ASK Receiver 300 - 440MHz	8-SOP	576-2420-ND	3.30	2.64	2.06
QwikRadio ASK Receiver 300 - 440MHz	8-SOP	576-2421-ND	3.30	2.64	2.06
QwikRadio Receiver 3V, 380 - 450MHz	16-QSOP	576-1964-5-ND	3.24	2.59	2.02
QwikRadio Receiver 3.3V, 300 - 350MHz	16-QSOP	576-1649-5-ND	3.24	2.59	2.02
QwikRadio Receiver 3.3V, 300 - 450MHz	16-QSOP	576-2997-ND	3.41	2.74	2.13
QwikRadio RF Receiver 300 - 450MHz	16-QSOP	576-3230-5-ND	3.11	2.49	1.94

† Cut Tape ‡ Tape and Reel

## QwikRadio™ RF Transmitters



Description	Package	Digi-Key Part No.	1	Price Each 25 100	Micrel Part No.
QwikRadio UHF ASK Transmitter	8-SOIC	576-1338-ND	2.34	1.87	1.46
QwikRadio UHF ASK Transmitter	8-SOIC	576-1339-ND	2.87	2.30	1.79
QwikRadio ASK Transmitter 300 - 450MHz	SOT23-6	576-3229-1-ND†	1.20	.96	.72
QwikRadio ASK Transmitter 300 - 450MHz	SOT23-6	576-3229-2-ND‡	—	1840.41/3,000	—
QwikRadio UHF ASK/FSK Transmitter	10-MSOP	576-1963-5-ND	1.73	1.38	1.04
290 - 980MHz ISM Band ASK/FSK Transmitter	24-MLF	576-1965-1-ND†	2.95	2.37	1.84
290 - 980MHz ISM Band ASK/FSK Transmitter	24-MLF	576-1965-2-ND‡	—	1675.61/1,000	—
1.8V, QwikRadio UHF ASK Transmitter	14-SOIC	576-1340-ND	2.94	2.36	1.83

† Cut Tape ‡ Tape and Reel

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

**Free shipping on orders over £50! All prices are in British pound sterling and include duties.**

uk.digikey.com — FREEPHONE: 0-800-587-0991 • 0-800-904-7786 — FREEFAX: 0-800-587-0992 • 0-800-904-7783

(UK091) 529