



Product Selection Guide

TX2-433-160-3V

	Model	Band	Data Rate	Suffixes
TX :	Transmitter	MHz	kbps	3V : 3Volt
RX :	Receiver		Max 'raw' data rate	5V : 5Volt
BiM :	Transceiver		(X2 analogue bandwidth)	HP : High Power

Frequencies

173MHz band for UK use*	151.300MHz for Australian use
169MHz band for European use	868MHz band for European use
418.00MHz for UK use	914.5MHz for North American use
458.5 – 459.1MHz for UK use	433.05 - 434.79MHz European (inc UK) use

VHF Narrow Band Transmitter, Receiver and Transceiver

TX1 Transmitter and RX1 receiver are Narrowband VHF modules in SIL foot print and available in 173.225MHz and 173.250MHz as standard. Other frequencies are also available from 151.300MHz to 173.250MHz.

The BiM1 is a narrow band VHF transceiver module and also available as separate BiM1T transmitter and BiM1R receiver, which can be used as dual-in-line equivalents of TX1 and RX1 respectively. BiM1 is available in 151.300MHz, 173.225MHz and 173.250MHz as standard.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX sensitivity	
TX1-173.225-10*	173.225	2.2 to 12	10	+10	-	EN 300 220-3
TX1-173.250-10	173.250	2.2 to 12	10	+10	-	EN 300 220-3
ENT1-169.40625-3	169.40625	5.0	3	+20	-	EN 300 220-3
TX1H-151.300-10	151.300	3.8 to 15	10	+20	-	Note 3
HX1-169.4125-3	169.4125	5.0	3	+27	-	EN 300 220-3
RX1-173.225-10*	173.225	2.7 to 12	10	-	-115	EN 300 220-3
RX1-173.250-10	173.250	2.7 to 12	10	-	-115	EN 300 220-3
NRX1-173.225-10*	173.225	2.9 to 15	10	-	-120	EN 300 220-3
NRX1-173.250-10	173.250	2.9 to 15	10	-	-120	EN 300 220-3
NRX1-151.300-10	151.300	2.9 to 15	10	-	-120	EN 300 220-3
RX1L-173.225-10*	173.225	3.1 to 9	10	-	-120	EN 300 220-3
RX1L-151.300-10	151.300	3.1 to 9	10	-	-120	EN 300 220-3
BiM1T-151.300-10	151.300	3.8 to 15	10	+20	-	Note 3
BiM1R-151.300-10	151.300	3.0 to 15	10	-	-120	Note 3
BiM1T-173.250-10	173.250	3.0 to 15	10	+10	-	Note 2
BiM1R-173.250-10	173.250	3.0 to 15	10	-	-120	Note 2
CVR1-173.250-10	173.250	3.0	10	-	-120	Note 3
CVR1-173.225-10*	173.225	3.0	10	-	-120	Note 3

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX sensitivity	
CVR1-51.300-10*	151.300	3.0	10	-	-120	Note 3
BiM1-151.300-10	151.300	3.8 to 15	10	+20	-120	Note 3
BiM1-173.225-10*	173.250	3.8 to 15	10	+10	-120	EN 300 220-3
BiM1-173.250-10	173.250	3.8 to 15	10	+10	-120	EN 300 220-3
BiM1H-169.4125-3.	169.4125	5.0	3	+27	-120	

*173.225MHz UK VHF allocation: alarm systems and security use only

Note: Other frequencies are also available from 120MHz to 180MHz. Non standard frequencies are subject to minimum order quantity and lead-time.

UHF Wide Band Transmitter and Receiver – 433MHz band

TX2 and RX2 are SAW based transmitter and receiver modules, which combine full screening with extensive internal filtering to ensure EMC compliance. TX2 & RX2s are CE marked by independent notified body. The new TX2A/TX2H and RX2A are crystal based PLL controlled FM transmitter and receiver modules. RX2A has Received Signal Strength Indicator output instead of CD on the standard RX2.

The new TX2S is a crystal-controlled miniature transmitters measuring only 20x10x2 mm hence suitable for small RF devices such as remote control key fobs and RF tags.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX Sensitivity	
TX2S-433-40-3V	433.92	2.2 to 4.0	40	+4	-	EN 300 220-3
TX2S-434-40-3V	434.42	2.2 to 4.0	40	+4	-	EN 300 220-3
TX2-418-40-3V	418	2.2 to 4.0	40	-3	-	Note 3
TX2-418-40-5V	418	4.0 to 6.0	40	0	-	Note 3
TX2-433-40-3V	433.92	2.2 to 4.0	40	+4	-	EN 300 220-3
TX2-433-40-5V	433.92	4.0 to 6.0	40	+10	-	EN 300 220-3
TX2-433-160-3V	433.92	2.2 to 4.0	160	+4	-	EN 300 220-3
TX2-433-160-5V	433.92	4.0 to 6.0	160	+10	-	EN 300 220-3
RX2-418-14-3V	418	3.0 to 4.0	14	-	-107	N/A
RX2-418-14-5V	418	4.0 to 6.0	14	-	-107	N/A
RX2-418-40-3V	418	3.0 to 4.0	40	-	-100	N/A
RX2-418-40-5V	418	4.0 to 6.0	40	-	-100	N/A
RX2-433-14-3V	433.92	3.0 to 4.0	14	-	-107	EN 300 220-3
RX2-433-14-5V	433.92	4.0 to 6.0	14	-	-107	EN 300 220-3
RX2-433-40-3V	433.92	3.0 to 4.0	40	-	-100	EN 300 220-3
RX2-433-40-5V	433.92	4.0 to 6.0	40	-	-100	EN 300 220-3
RX2-433-160-3V	433.92	3.3 to 4.0	160	-	-90	EN 300 220-3
RX2-433-160-5V	433.92	4.0 to 6.0	160	-	-90	EN 300 220-3
TX2A-433-64	433.92	2.2 to 16	64	+10		EN 300 220-3
TX2A-433-64-5V	433.92	4.0 to 6.0	64	+10	-	EN 300 220-3
TX2A-433-64-3V	433.92	3.3 to 4.0	64	+10	-	EN 300 220-3
TX2H-433-64-5V	433.92	4.5 to 5.5	64	+14	-	Note 3
TX2H-433-64-3V	433.92	2.5 to 3.5	64	+14	-	Note 3
TX2EH-433-64-5V	433.92	4.5 to 5.5	64	+20	-	Note 3

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX Sensitivity	
RX2A-433-10	433.92	2.7 to 16	10	-	-108	EN 300 220-3
RX2A-433-64	433.92	2.7 to 16	64	-	-101	EN 300 220-3
RX2A-434-10	434.42	2.7 to 16	10	-	-108	EN 300 220-3
RX2A-434-64	434.42	2.7 to 16	64	-	-101	EN 300 220-3
RX2G-433-15	433.92	5.0	15	-	-108	EN 300 220-3
RX2G-433-64	433.92	5.0	64	-	-102	EN 300 220-3
RX2G-434-15	434.42	5.0	15	-	-108	EN 300 220-3
RX2G-434-64	434.42	5.0	64	-	-102	EN 300 220-3

UHF Wide Band Transmitter and Receiver – 868/915 MHz band

TX3A transmitters and RX3A receivers are UHF Wide Band FM modules and they operate on European and North American ISM bands. The European version is CE marked by independent notified body by complying to radio standard EN 300-220-3 and EMC standard EN 301 489-3. The new TX3B radio transmitter module is an enhanced high power replacement for the European version TX3A-869-64 transmitter. TX3H is high power transmitter operating in the 869.5MHz European licence exempt frequency.

The new TX3S is a crystal-controlled miniature transmitters measuring only 20x10x2 mm hence suitable for small RF devices such as remote control key fobs and RF tags.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX Sensitivity	
TX3S-869-40	869.85	2.2 to 4.0	40	+1	-	EN 300 220-3
TX3A-869-64	869.85	2.2 to 16	64	+1	-	EN 300 220-3
TX3A-914-64	914.5	2.2 to 16	64	+1	-	Note 1
TX3B-869-64	869.85	2.9 to 16	64	+7	-	
TX3B-868-64	868.30	2.9 to 16	64	+9	-	
TX3H-869.50-10	869.50	5.0	10	+27	-	
RX3A-868-10	868.30	2.7 to 16	10	-	-100	EN 300 220-3
RX3A-868-64	868.30	2.7 to 16	64	-	-105	EN 300 220-3
RX3A-869.50-10	869.50	2.7 to 16	10	-	-105	EN 300 220-3
RX3A-869-10	869.85	2.7 to 16	10	-	-105	EN 300 220-3
RX3A-869-64	869.85	2.7 to 16	64	-	-100	EN 300 220-3
RX3G-869-15	869.85	5.0	15	-	-108	EN 300 220-3
RX3G-869-64	869.85	5.0	64	-	-102	EN 300 220-3
RX3A-914-10	914.5	2.7 to 16	10	-	-105	
RX3A-914-64	914.5	2.7 to 16	64	-	-100	

UHF Narrow Band Transmitter and Receiver

The NTX2 and NRX2 are narrow band transmitter and receiver modules and offer a low power, reliable data link in a Radiometrix SIL standard pin out and foot print. This makes the NTX2/NRX2 pair ideally suited to those low power applications where existing single frequency wideband UHF modules have insufficient range.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX Sensitivity	
NTX2-434.075-10	434.075	2.9 to 15	10	+10	-	Note 1
NTX2-434.65-10	434.650	2.9 to 15	10	+10	-	EN 300 220-3
NTX2-434.65-10	434.650	3.6 to 15	10	+14	-	Note 1
NTX2-458.700-10	458.700	2.9 to 15	10	+10	-	EN 300 220-3
NRX2-434.075-10	434.075	2.9 to 15	10	-	-118	EN 300 220-3
NRX2-434.65-10	434.650	2.9 to 15	10	-	-118	EN 300 220-3
NRX2-458.700-10	458.700	2.9 to 15	10	-	-118	EN 300 220-3

UHF Wide Band Transceiver

First generation BiM and second generation BiM2 and BiM3A are UHF wide band Bi-directional Modules (transceivers). The module integrates a low power UHF FM transmitter and matching superhet receiver. The new BiM2A is an enhanced replacement for the SAW based BiM2 and has better frequency accuracy and temperature stability. The BiM3B is an enhanced higher power replacement for the European version BiM3A-869-64.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
BiM-418-40	418	4.5 to 5.5	40	0	-100	Note 3
BiM-433-40	433.92	4.5 to 5.5	40	0	-100	Note 3
BiM-433-40-HP	433.92	4.5 to 5.5	40	+ 6	-100	Note 3
BiM2-433-64-3V	433.92	3.3	64	+6	-88	EN 300 220-3
BiM2-433-64-5V	433.92	5.0	64	+10	-93	EN 300 220-3
BiM2-433-64-S*	433.92	5.0	64	+10	-93	EN 300 220-3
BiM2-433-160-3V	433.92	3.3	160	+10	-88	EN 300 220-3
BiM2-433-160-5V	433.92	5.0	160	+10	-90	EN 300 220-3
BiM2A-433-10	433.92	2.9 to 16	10	+10	-105	EN 300 220-3
BiM2A-433-64	433.92	2.9 to 16	64	+10	-100	EN 300 220-3
BiM2A-434-10	434.42	2.9 to 16	10	+10	-105	EN 300 220-3
BiM2A-434-64	434.42	2.9 to 16	64	+10	-100	EN 300 220-3
BiM2A-433-64-3V-CD	433.92	3.0	10	+10	-105	EN 300 220-3
BiM2A-433-64-5V-CD	433.92	5.0	10	+10	-105	EN 300 220-3
BIM3B-869-10	869.85	2.9 to 16	10	+7	-105	EN 300 220-3
BIM3B-869-64	869.85	2.9 to 16	64	+7	-100	EN 300 220-3
BIM3B-868-10	868.30	2.9 to 16	10	+14	-105	EN 300 220-3
BIM3B-868-64	868.30	2.9 to 16	64	+14	-100	EN 300 220-3
BIM3A-869-10	869.85	2.7 to 6.0	10	+2.5	-105	EN 300 220-3
BIM3A-869-64	869.85	2.7 to 6.0	64	+2.5	-100	EN 300 220-3
BiM3A-914-10	914.5	2.7 to 6.0	10	-1	-105	Note 1
BiM3A-914-64	914.5	2.7 to 6.0	64	-1	-100	Note 1

* This is intended for RPC or Manchester code only and has fast settling time (maximum 1ms)

- All our BiM series modules have identical pin outs and footprint.

Radio Packet Controller

The RPC, RPC2A, FRPC2, RPC3A/B and SP2 are intelligent transceiver modules, which enable a radio network/link to be simply implemented between a number of digital devices. They are self-contained modules, which integrate the BiM/BiM2A and BiM3/BIM3B transceiver with a microcontroller (RPC-000-SO IC / FRPC-000-SO IC).

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)	
				TX Power	RX Sensitivity
RPC-418-40	418	5.0	40	0	-100
RPC-433-40	433.92	5.0	40	+6	-100
RPC2A-433-64	433.92	5.0	64	+10	-101
FRPC2-433-160	433.92	5.0	160	+10	-90
RPC3B-869-64	869.85	5.0	64	+7	-101
RPC3-914-64	914.5	5.0	64	+1	-95
SP2-433-64	433.92	5.0	64	+10	-95
SP2-433-160	433.92	5.0	160	+10	-90

Radio Packet Modem

The VHF Radio Packet Modem (RPM1), UHF Radio Packet Modem (RPM2A, RPM3, RPM3B) and UHF SpacePort Modem (SPM2) are low cost highly integrated intelligent serial modems that enable a radio network/link to be simply implemented between a number of digital devices.

Module Part number	Frequency (MHz)	Supply (Volts)	Throughput (kbit/s)	Performance (dBm, 50Ω)	
				TX Power	RX Sensitivity
RPM1-173.250-3	173.250	5.0	3.7	+10	-118
RPM1-173.250-3-3V	173.250	3.3	3.7	+10	-118
RPM1-173.250-3-HP	173.250	5.0	3.7	+20	-118
RPM1-151.300-3	151.300	5.0	3.7	+20	-118
RPM1-151.300-3-LP	151.300	5.0	3.7	+10	-118
RPM1-151.300-3-LP-3V	151.300	3.3	3.7	+10	-118
RPM2A-433-17	433.92	5.0	17	+10	-100
RPM2A-433-17-3V	433.92	3.0	17	+10	-100
RPM2A-433-17-SMA	433.92	5.0	17	+10	-100
RPM2A-433-17-3V-SMA	433.92	3.0	17	+10	-100
RPM2A-433-17-ANT	433.92	5.0	17	+10	-100
RPM2A-433-17-3V-ANT	433.92	3.0	17	+10	-100
RPM3B-869-17	869.85	5.0	17	+7	-100
RPM3B-868-17	868.30	5.0	17	+14	-100
RPM3-869-17	869.85	5.0	17	+2	-100
RPM3-914-17	914.50	5.0	17	+1	-100
RPM3-869-17-3V	869.85	3.0	17	+2	-100
RPM3-914-17-3V	914.50	3.0	17	+1	-100
RPM3B-869-17-SMA	869.85	5.0	17	+7	-100
RPM3B-868-17-SMA	868.30	5.0	17	+14	-100
RPM3-869-17-SMA	869.85	5.0	17	+2	-100
RPM3-914-17-RPS	914.50	5.0	17	+1	-100
RPM3-869-17-3V-SMA	869.85	3.0	17	+2	-100
RPM3-914-17-3V-RPS	914.50	3.0	17	+1	-100
RPM3B-869-17-ANT	869.85	5.0	17	+7	-100
RPM3B-868-17-ANT	868.30	5.0	17	+14	-100

Module Part number	Frequency (MHz)	Supply (Volts)	Throughput (kbit/s)	Performance (dBm, 50Ω)	
				TX Power	RX Sensitivity
RPM3-869-17-ANT	869.85	5.0	17	+2	-100
RPM3-914-17-ANT	914.50	5.0	17	+1	-100
RPM3-869-17-3V-ANT	869.85	3.0	17	+2	-100
RPM3-914-17-3V-ANT	914.50	3.0	17	+1	-100
SPM2-433-18	433.92	5.0	18	+10	-95
SPM2-433-18-3V	433.92	3.3	18	+6	-90
SPM2-433-28	433.92	5.0	28	+10	-90

***RPS**: with RPSMA connector, ***SMA**: with SMA connector; ***ANT**: with SMA/RPSMA connector and antenna

UHF Multi Channel Radio Modem

The TDL2A and TDH2 are 9600baud half-duplex multi channel OEM radio modems in BiM2 footprint, operating on European and Australian 433MHz ISM band. Both acts as a transparent serial cable to attached host. The TDi2 interface board enables a cable free transparent data link between RS232 ports without any additional interface circuitry. TXL2 and RXL2 are 9600 baud simplex multi channel radio modems in SIL footprint.

Module Part number	Frequency (MHz)	Channles	Supply (Volts)	Baud rate (kbit/s)	Performance (dBm, 50Ω)	
					TX Power	RX Sensitivity
TDL2A-433-9	433.285-434.565	5	5.0	9.6	+10	-107
TDL2A-433-4	433.285-434.565	5	5.0	4.8	+10	-107
TDH2-433-9	433.285-434.565	5	5.0	9.6	+14	-107
TDH2-433-4	433.285-434.565	5	5.0	4.8	+14	-107
TDL2T-433-9	433.285-434.565	5	5.0	9.6	+10	-
TDL2R-433-9	433.285-434.565	5	5.0	9.6	-	-107
TDL2T-433-4	433.285-434.565	5	5.0	4.8	+10	-
TDL2R-433-4	433.285-434.565	5	5.0	4.8	-	-107
TDi2-433-9	433.285-434.565	5	7 to 15	9.6	+10	-107
TDi2-433-4	433.285-434.565	5	7 to 15	4.8	+10	-107
TXL2-433-9	433.285-434.565	5	5.0	9.6	+10	-
RXL2-433-9	433.285-434.565	5	5.0	9.6	-	-107
TXL2-433-4	433.285-434.565	5	5.0	4.8	+10	-
RXL2-433-4	433.285-434.565	5	5.0	4.8	-	-107

9600 /1200 baud serial RF Modem IC

The i9600 is a 9600baud half-duplex serial modem controller suitable for use with wideband receivers, transmitters and transceivers. The NBEK controller IC features an i1200 half duplex modem function suitable for narrow band receivers, transmitters and transceivers.

Device Part number	Package
i9600-000-SS	Shrink Small Outline
i9600-000-SO	Small Outline
i9600-000-DIL	Plastic Dual In Package
NBEK-000-SS	Shrink Small Outline
NBEK-000-SO	Small Outline
NBEK-000-DIL	Plastic Dual In Package

*The i9600 and NBEK modem ICs cannot be ordered separately. They should be ordered with equal number of Radiometrix radio modules.

VHF Narrow Band FM multi channel radio modules with built-in modem

The RX1M receiver, TX1M transmitter and SMX1 and TR1M transceiver modules offer a low power, reliable data link in an industry-standard pin out and footprint. They feature up to 128 serial select and 8 parallel select channels. TX1M/RX1M and TR1M are available in any 2MHz band from 135-175MHz. The RF power output of TX1M can be factory set from 10mW up to 200mW. The SMX1 transceiver is in any 2MHz band from 130 - 180MHz with up to 50mW RF power output.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Notes
				TX Power	RX Sensitivity	
TX1M-xxx-5	*135-175	4.5 - 15	5	+10 to +23	-	Non-inverted
TX1I-xxx-5	*135-175	4.5 - 15	5	+10 to +23	-	Inverted
TX1M-xxx-10	*135-175	4.5 - 15	5	+10 to +23	-	Non-inverted
TX1I-xxx-10	*135-175	4.5 - 15	5	+10 to +23	-	Inverted
RX1M-xxx-5	*135-175	4.5 - 15	5	-	-118	
RX1M-xxx-10	*135-175	4.5 - 15	5	-	-118	
SMX1-173-5	173.200 - 173.325	4.2 - 15	5	+0 to +17	-118	
SMX1-151-5	150.825 - 152.450	4.2 - 15	5	+0 to +17	-118	
TR1M-xxx-5	*135-175	4.5 - 15	5	+10 to +20	-118	
UHX1-144-5	144 -146	5	5	+0 to +27	-118	

*Where xxx is any 3MHz band from 135-175MHz for TX1M and any 2MHz band from 130-180MHz for RX1M and TR1M.

VHF Low cost Narrow Band FM multi channel radio modules

The LMT1 and LMR1 are low cost multi channel transmitter/receivers with up to 32 parallel and serial select channel.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)	
				TX Power	RX Sensitivity
LMT1-173-10	173.200 - 173.325	3.1 - 15V	10	+10	-
LMR1-173-5	173.200 - 173.325	3.1 - 15V	5	-	-118
LMR1-173-10	173.200 - 173.325	3.1 - 15V	10	-	-118
LMT1-151-10	150.825 - 152.450	3.1 - 15V	10	+10	-
LMT1-151-10	150.825 - 152.450	4.1 - 15V	10	+20	-
LMR1-151-5	150.825 - 152.450	3.1 - 15V	5	-	-118
LMR1-151-10	150.825 - 152.450	3.1 - 15V	10	-	-118
LMT1-173-5-12k5	173.200 - 173.325	3.1 - 15V	5	+10	-
LMR1-173-5-12k5	173.200 - 173.325	3.1 - 15V	5	-	-117
LMT1-151-5-12k5	150.825 - 152.450	4.1 - 15V	5	+20	-
LMR1-151-5-12k5	150.825 - 152.450	3.1 - 15V	5	-	-117

Note: Other custom variants from 130 - 180MHz on any 2MHz band

UHF Narrow Band FM multi channel radio modules with built-in modem

The RX2M receiver, TX2M transmitter and TR2M and SMX2 transceiver modules offer a low power, reliable data link in an industry-standard pin out and footprint. Two versions are available, covering the 458.5-458.8MHz UK band (at 100mW) and the European 433.05-434.79MHz band.

USX2 is small multi-channel half duplex UHF transceiver available for operation on 315MHz, 433MHz and 458MHz bands with the user programmable RF power output of up to 100mW.

The LSR2 is a low current multichannel design in an RX2M footprint/pinout. It is similar in performance to a LMR2 receiver but only draws 10mA at 3.1 -15V.

RMX2 is a narrowband multichannel module with 25 kHz channel steps, but still achieves sub-10mS TX/RX switching speed, making it an ideal RF unit for inclusion in feedback systems.

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Notes
				TX Power	RX Sensitivity	
TX2M-458-5	458.5 - 459.1	4.5 - 15	5	+20	-	Non-inverted
TX2I-458-5	458.5 - 459.1	4.5 - 15	5	+20	-	Inverted
RX2M-458-5	458.5 - 459.1	4.5 - 15	5	-	-118	
LSR2-375-5	375	3.1 - 15	5	-	-118	
TX2M-433-5	433.05 - 434.79	4.5 - 15	5	+10	-	Non-inverted
TX2I-433-5	433.05 - 434.79	4.5 - 15	5	+10	-	Inverted
RX2M-433-5	433.05 - 434.79	4.5 - 15	5	-	-118	
TX2M-458-10	458.5 - 459.1	4.5 - 15	10	+20	-	Non-inverted
TX2I-458-10	458.5 - 459.1	4.5 - 15	10	+20	-	Inverted
RX2M-458-10	458.5 - 459.1	4.5 - 15	10	-	-118	
TR2M-433-5	433.05 - 434.79	4.5 - 15	5	+10	-118	
TR2I-433-5	433.05 - 434.79	4.5 - 15	5	+10	-118	Inverted TX/RX
TR2M-458-5	458.5 - 459.1	4.5 - 15	5	+20	-118	
TR2I-458-5	458.5 - 459.1	4.5 - 15	5	+20	-118	Inverted TX/RX
TR2M-458-10	458.5 - 459.1	4.5 - 15	10	+20	-118	
TR2I-458-10	458.5 - 459.1	4.5 - 15	10	+20	-118	Inverted TX/RX
SMX2-433-5	433.05 - 434.79	4.2 - 15	5	+10	-118	
USX2-315-5	315 - 315.75	3.1 - 15	5	-10 - +20	-118	
USX2-433-5	433.05 - 434.79	3.1 - 15	5	-10 - +20	-118	
USX2-458-5	458.5 - 459.1	3.1 - 15	5	-10 - +20	-118	
RMX2-433-10	433.05 - 434.79	3.0 - 15	10	+10	-118	
RMX2-458-10	458.5 - 459.1	3.0 - 15	10	+10	-118	
BHX2-458-5	458.525 - 459.1	5.5 - 15	5	+27	-118	

UHF Low cost Narrow Band FM multi channel radio modules

The TLC2H and RLC2H are lo cost multi channel transmitter/receivers with industry standard pinout and foot print. They have up to 32 parallel and serial select channel. LMT2 and LMR2 are enhanced performance transmitter and receivers in Radiometrix pin out.

The HVR2 receiver is the high vibration resistant version of the RLC2/LMR2 receiver. It is immune to mechanical vibration below 500Hz, hence suitable for mechanically troublesome application. E.g. Crane control

Module Part number	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)	
				TX Power	RX Sensitivity
TLC2H-433-5	433.875-434.650	3.1 - 15.0	5	+10	-
RLC2H-433-5	433.875-434.650	3.7 - 15.0	5	-	-118
LMT2-433-5	433.900- 434.650	3.1 - 15V	5	+10	-
LMR2-433-5	433.900- 434.650	3.1 - 15V	5	-	-118
LMT2-433-10	433.900- 434.650	3.1 - 15V	10	+10	-
LMR2-433-10	433.900- 434.650	3.1 - 15V	10	-	-118
LMT2-458-5	458.525- 459.100	3.1 - 15V	5	+10	-
LMT2-458-5	458.525- 459.100	4.1 - 15V	5	+20	-
LMT2-458-10	458.525- 459.100	3.1 - 15V	10	+10	-
LMT2-458-10	458.525- 459.100	4.1 - 15V	10	+20	-
LMR2-458-5	458.525- 459.100	3.1 - 15V	5	-	-118
LMR2-458-10	458.525- 459.100	3.1 - 15V	10	-	-118
HVR2-433-5	433.875-434.650	3.7 - 15.0	5	-	-118

- Note:**
1. FCC approval must be obtained for finished product incorporating these modules
 2. Test report will be available soon
 3. The finished product incorporating these modules may require approval from the Radio Authority of the respective country.
 4. The typical RF receiver sensitivity of wide band receivers is quoted for 1ppm BER.

RF remote control Encoder/decoder

The KFX2 is a UHF code hopping 5 button keyfob transmitter where as the KFX2 is an OEM version intended for PCB mounting and both are suitable for use with the matching KDEC decoder or KRX-416-000-DIL decoder IC to provide a secure remote controlled link in excess of 100 metres over open ground.

Module Part number	Frequency (MHz)	Supply (Volts)
KTX2-433	433.92	3.0 – 6.0
KFX2-433	433.92	6.0
KDEC-433-000	433.92	7.0 - 15
*KDEC-xxx-00n	433.92	7.0 – 15

- * “n” is a number between 1 and 5. This version is optimised for use with KFX (Key-fob transmitter with 1 – 5 buttons fitted). Only one output at a time may be activated.
- Where “xxx” is frequency band in MHz – 433 is standard. Please contact sales for other requirements

RF remote control Encoder/decoder IC

Control44 is a 4 bit address, 4 bit data encoder and decoder where as Control124 is 12 bits data and 4 bit address encoder/decoder combined in a single IC. Both devices can be operated in either Encode or Decode mode. They use 1kbps bi-phase communication protocol with preamble, which is specifically designed to be used in RF remote control applications. CTA88 is an 8 bit address, 8 bit data encoder and decoder combined in a single IC.

Key-code Receiver KRX416 is a single IC solution for decrypting and decoding Radiometrix code-hopping transmitters like KFX2 and KTX2-433.

Module Part number	Description	Package
CTR44-000-SS	Standard Control44 ($\leq 4\text{MHz}$)	Shrink Small Outline
CTR44-000-SO	Standard Control44 ($\leq 4\text{MHz}$)	Small Outline
CTR44-000-DIL	Standard Control44 ($\leq 4\text{MHz}$)	Plastic Dual In Package
CTR44L-000-SS	Low Voltage ($\leq 4\text{MHz}$)	Shrink Small Outline
CTR44L-000-SO	Low Voltage ($\leq 4\text{MHz}$)	Small Outline
CTR44L-000-DIL	Low Voltage ($\leq 4\text{MHz}$)	Plastic Dual In Package
CTR44H-000-SS	High Speed (4 - 20MHz)	Shrink Small Outline
CTR44H-000-SO	High Speed (4 - 20MHz)	Small Outline
CTR44H-000-DIL	High Speed (4 - 20MHz)	Plastic Dual In Package
CTR124-000-SS	Standard Control44 ($\leq 4\text{MHz}$)	Shrink Small Outline
CTR124-000-SO	Standard Control44 ($\leq 4\text{MHz}$)	Small Outline
CTR124-000-DIL	Standard Control44 ($\leq 4\text{MHz}$)	Plastic Dual In Package
CTR124L-000-SS	Low Voltage ($\leq 4\text{MHz}$)	Shrink Small Outline
CTR124L-000-SO	Low Voltage ($\leq 4\text{MHz}$)	Small Outline
CTR124L-000-DIL	Low Voltage ($\leq 4\text{MHz}$)	Plastic Dual In Package
CTR124H-000-SS	High Speed (4 - 20MHz)	Shrink Small Outline
CTR124H-000-SO	High Speed (4 - 20MHz)	Small Outline
CTR124H-000-DIL	High Speed (4 - 20MHz)	Plastic Dual In Package
CTA88-000-SS	Standard Control44 ($\leq 4\text{MHz}$)	Shrink Small Outline
CTA88-000-SO	Standard Control44 ($\leq 4\text{MHz}$)	Small Outline
CTA88-000-DIL	Standard Control44 ($\leq 4\text{MHz}$)	Plastic Dual In Package
CTA88L-000-SS	Low Voltage ($\leq 4\text{MHz}$)	Shrink Small Outline
CTA88L-000-SO	Low Voltage ($\leq 4\text{MHz}$)	Small Outline
CTA88L-000-DIL	Low Voltage ($\leq 4\text{MHz}$)	Plastic Dual In Package
CTA88H-000-SS	High Speed (4 - 20MHz)	Shrink Small Outline
CTA88H-000-SO	High Speed (4 - 20MHz)	Small Outline
CTA88H-000-DIL	High Speed (4 - 20MHz)	Plastic Dual In Package
KRX416-000-SS	Key-code Decoder	Shrink Small Outline
KRX416-000-SO	Key-code Decoder	Small Outline
KRX416-000-DIL	Key-code Decoder	Plastic Dual In Package

Evaluation Kits:

- 1) Universal Evaluation kit: TX1(H)/HX1/RX1, NTX2/NRX2, TX2(A)/TX2H/RX2(A), TX3A/RX3A, BiM1T/ BiM1R, CVR1, BiM/1/2/3A and NiM2 hardware test
- 2) Narrow band Eval Kit (NBEK)
- 3) RPC development kit
- 3) SP2 Evaluation kit
- 4) SPM2 evaluation kit
- 5) Control44 Encoder/decoder Evaluation kit
- 6) TDL2A Evaluation kit

First generation radio modules*

Module	Frequency (MHz)	Supply (Volts)	Data rate (kbit/s)	Performance (dBm, 50Ω)		Type Approval
				TX Power	RX Sensitivity	
TXM-418-5	418	6.0 to 9.0	5	0	-	MPT 1340
TXM-418-10	418	2.7 to 4.0	10	- 3	-	MPT 1340
TXM-433-5	433.92	6.0 to 9.0	5	0	-	EN 300-220-3
TXM-433-10	433.92	2.7 to 4.0	10	- 3	-	EN 300-220-3
SILRX-418-5	418	4.0 to 9.0	5	-	-107	N/A
SILRX-418-10	418	4.0 to 9.0	10	-	-100	N/A
SILRX-433-5	433.92	4.0 to 9.0	5	-	-107	N/A
SILRX-433-10	433.92	4.0 to 9.0	10	-	-100	N/A
RXM-418-10	418	4.5 to 5.5	10	-	-105	N/A
RXM-433-10	433.92	4.5 to 5.5	10	-	-105	N/A

TXM - UHF FM transmitter module

SILRX - Single In Line (SIL) UHF FM receiver module

RXM - UHF FM receiver module with RSSI, Jamming Signal Detector, Antenna Tamper Sensing

*Not recommended for new designs. These modules will remain in production for existing customers.

Please note that the values in the above tables are typical. For full details, please refer to the data sheet for the respective module. Data sheets can be downloaded in PDF format from Radiometrix website.

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The Intrastat commodity code for all our modules is: 8542 6000

R&TTE Directive

After 7 April 2001 the manufacturer can only place finished product on the market under the provisions of the R&TTE Directive. Equipment within the scope of the R&TTE Directive may demonstrate compliance to the essential requirements specified in Article 3 of the Directive, as appropriate to the particular equipment. Further details are available on The Office of Communications (Ofcom) web site:

<http://www.ofcom.org.uk/radiocomms/ifi/>

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