

Radio module Long Range (LR)

Includes:

- 1 Long Range radio module

This product comes without antenna, remember to add our [dipole antenna](#) or [vehicle mount](#) antenna to the cart.



More info about the product!



Radio module Long Range (LR) has several different configurations to provide you with flexibility:

SKU	Variation Name
AS-XBEE-LR-EU-SMA-01	Europe
AS-XBEE-LR-NA-SMA-01	North America
AS-XBEE-LR-AU-SMA-01	Australia

Get a discounted bulk price on this product for orders of 50 units or more. Contact us at info@ardusimple.com to get a quote.

Description

The Long Range version of our Radio Module. Based on Digi XBee SX series, but on through hole format and with SMA connector. With a configuration optimized for sending RTK corrections over the air.

With this radio module you will be able to send RTK corrections [up to 10 km](#) in both point-to-point and point-to-multipoint configurations. This distance will depend on the region of use, subject to local regulations.

Good to know:

- Compatible with all ArduSimple boards.
- This radio is included in our [simpleRTK2B - Starter Kit LR](#).
- The radio is sent pre-configured at 115'200bps and will connect automatically to other LR radios from the same region.
- The radio is sent pre-configured at 20mW output power which is the maximum for this radio.
- The radio comes without antenna, remember to add our dipole antenna or vehicle mount antenna to the cart.

Specifications

Interfaces

- UART
- RS232 ([requires accessory](#))

LR radio features

- Communications: Bi-directional Point-to-Point or Unidirectional Point-to-Multipoint (unlimited rovers)
- Antenna type: external passive
- Antenna connector (radio side): SMA female
- Frequency:
 - Europe: 863-870 MHz
 - North America: 902-907 + 915-927 MHz (configurable)
 - Australia: 915-927 MHz
 - New Zealand: 917-927 MHz
- Output power: 20 mW (13 dBm)
- Range in line of sight:
 - Urban: 2.5 km
 - Rural: 5 km
 - Rural with complete RF line of sight: 10 km
- Operating temperature Range: -40 to +85deg
- Documentation: RED, RoHS, FCC, IC, ACMA, RSM

Image Gallery



Pinout

TOP VIEW



Description	Name	#
3.0-3.6V with up to 1A peak	VCC	1
Data out VCC level	TX	2
Data in VCC level	RX	3
Reserved, do not connect	RES4	4
Reserved, do not connect	RES5	5
Reserved, do not connect	RES6	6
Reserved, do not connect	RES7	7
Reserved, do not connect	RES8	8
Reserved, do not connect	RES9	9
Must connect to GND	GND	10

#	Name	Description
20	RES20	Reserved, do not connect
19	RES19	Reserved, do not connect
18	RES18	Reserved, do not connect
17	RES17	Reserved, do not connect
16	RES16	Reserved, do not connect
15	RES15	Reserved, do not connect
14	RES14	Reserved, do not connect
13	RES13	Reserved, do not connect
12	RES12	Reserved, do not connect
11	RES11	Reserved, do not connect

Documentation

User Guide	https://www.ardusimple.com/xbee-antenna-installation-guide/
Download CAD models	https://www.ardusimple.com/wp-content/uploads/3D_CAD/XBeeLR.STEP https://www.ardusimple.com/wp-content/uploads/3D_CAD/XBeeLR.STEP https://www.ardusimple.com/wp-content/uploads/3D_CAD/XBeeLR.STEP https://www.ardusimple.com/wp-content/uploads/3D_CAD/XBeeLR.STEP

Radio module Long Range (LR) includes free basic technical support. Contact info@ardusimple.com for more information.

Data and descriptions in this document are subject to change without notice. Product photos and pictures are for illustration purposes only and may differ from the real product appearance.