

XRF wireless RF radio UART RS232 serial data module XBee shape

Code: R001



Product Description

Incredible results over 3Km using a pair on standard whip antennas using a PICAXE on the openmicros forum [here](#)

New - 2.54mm break out board available see other items

Been looking for an easy to use wireless module for your prototypes? One with superior range (upto 1Km), greater in building penetration, lower current consumption and lower cost? We think the XRF might be what you have searched for.

The communication of the device is normal serial, it transparently passes characters to and from XRF's. You don't need to do CRC's, any error checking etc it's all done for you.

XBee socket friendly 2 x 10 pin 2mm pitch layout RF module, in many projects it'll be a drop in replacement for series 1 XBees. Potentially this means your existing code needs no changes.

- Out the box direct it just works, no complex setups, what you send to one appears on all the other XRF's. The packetisation, data checking etc is all done for you. Simply plug and send serial 9600bps data (many other baud rates supported)
- Can specify a network identifier PANID to separate communications into separate networks if desired.
- Based on the Texas Instruments CC1110 combined micro & RF transceiver, runs at 868.3Mhz, same chip can support 315, 433, 900 & 915Mhz
- Over the air data rate of 250Kbps with a max of 500Kbps
- Fits our XBS shield and XINO Pro boards and is a total drop in replacement for XBee
- Can be programmed in it's own right. We suggest the free version of IAR's C compiler as there is TI sample code published on the web or you can use SDCC
- Supports serial bootloading for firmware updates without a hardware programmer and using just RX/TX
- Facilitates remote Arduino/Xino over-the-air programming
- v1.5 now has 5v tollerant serial in so you can use with a 5v micro without level conversion.
- Supports 128bit AES encryption like all the other devices do.

NOTE: new firmware supports 2 sleep states, the lowest being a miraculous 0.2 microamps.

PCB can support straight or right angled RP-SMA for easy connection to external antennas (new v1.5 supports end shot too)