

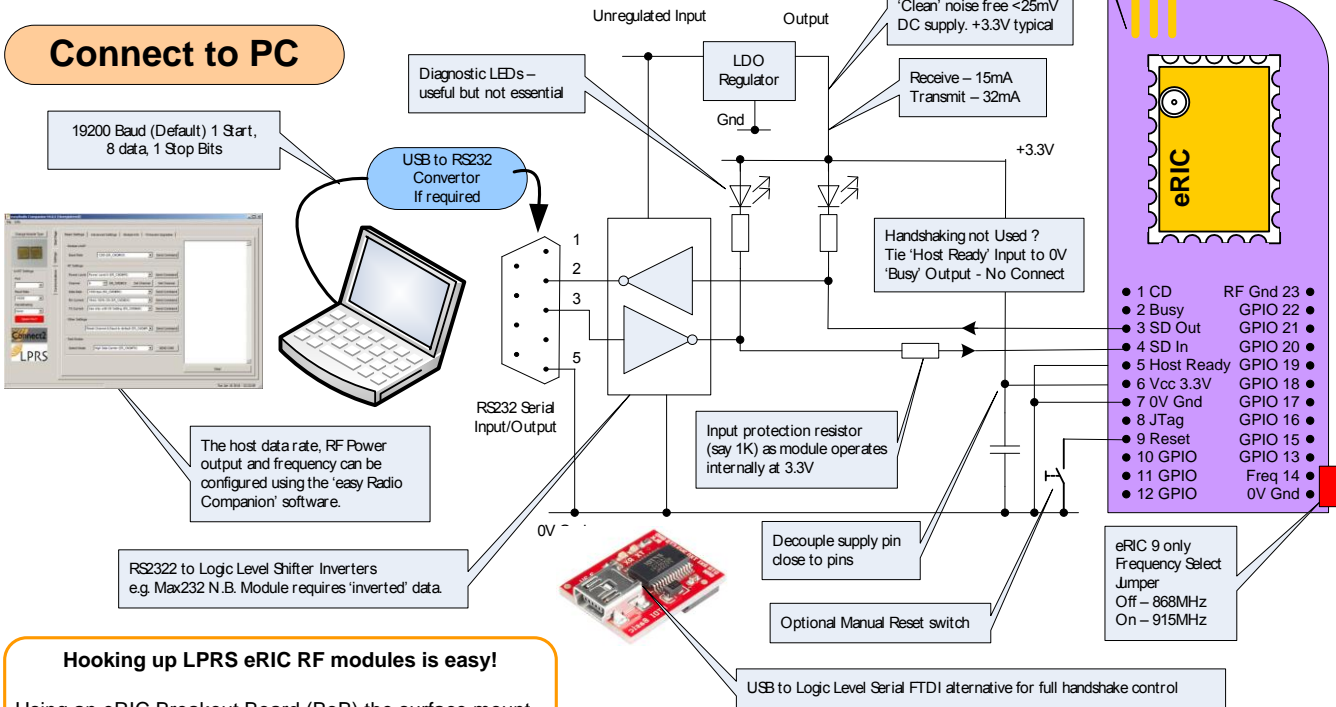
¼ Wave Whip Antenna
16.4 cms for 433 MHz
8.2 cm for 868/915 MHz
A length of solid copper wire will work OK!

Please read this in conjunction with the eRIC and the eRIC Breakout Board datasheets.

Break Out Board design is 'Open Hardware' designed and published by:
Rick Winscott – www.quilix.com

See: <https://github.com/rwinscot/eRIC-breakout>

Connect to PC



Hooking up LPRS eRIC RF modules is easy!

Using an eRIC Breakout Board (BoB) the surface mount castellated eRIC connections are brought out to more convenient 0.1" pitch pins that can be plugged into any prototyping breadboard.

Power and logic level serial input and serial output are the minimal connections required. Serial data is 'inverted' allowing direct connection to uController UARTs or connection to PC serial ports via level shifter/inverters.

A USB to logic level converter (Arduino FTDI Basic or Friend or similar) can alternatively be used if full 'handshaking' is required. Use of handshake (flow control) is optional but should be used for highest data throughput.

eRIC operates on a 3.3V supply. Take care not to damage inputs when connecting to any 5V powered devices by fitting 1k resistors in series with the signal lines as shown in the diagrams. eRIC outputs should be able to drive 5V logic level inputs or loads sinking or sourcing no more than 10mA such as LEDs etc. The power supply should be locally decoupled and capable of continuously supplying the peak transmit current.

Low power modes are set using serial commands detailed in the eRIC data sheet.

Between 1 and 250 bytes of data can be sent in one transmission which automatically begins when the buffer is full or when 'no data' is detected for twice the character time. Over air data rate is 38400 bps. Host data rate can be set between 2400 and 115200 Baud (19,200 default).

A ¼ wave whip antenna can be connected directly to the on board SMA RF connector or via a flexible 50R cable to the eRIC UFL connector.

Connect to uController

