

# Good and cheap XBee replacement \* by Nosepo



<http://www.goodluckbuy.com/apc220-wireless-communication-module-for-arduinousb-converter.html> (~45\$)

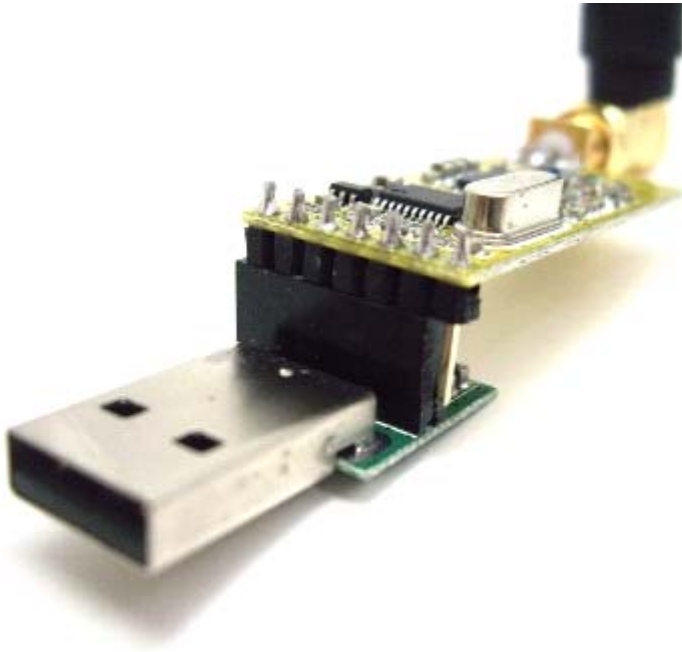
These modules are working fine on Windows XP /32bit up to Windows 7 /64bit.

All Mission Planner features are working with the wireless connection - except the setup cos wireless can't work in CLI mode.

It's not necessary to change anything in the code!

### Wireless module configuration:

- 1.- Download the usb drivers and install the Silabs ones: [http://www.silabs.com/Support%20Documents/Software/CP210x\\_VCP\\_Win\\_XP\\_S2K3\\_Vista\\_7.exe](http://www.silabs.com/Support%20Documents/Software/CP210x_VCP_Win_XP_S2K3_Vista_7.exe)
- 2.- Download the app: [http://www.ctmelectronica.com.ar/descargas/software/APC220\\_230\\_802.rar](http://www.ctmelectronica.com.ar/descargas/software/APC220_230_802.rar)
- 3.- Connect one module to usb adapter and both to PC.

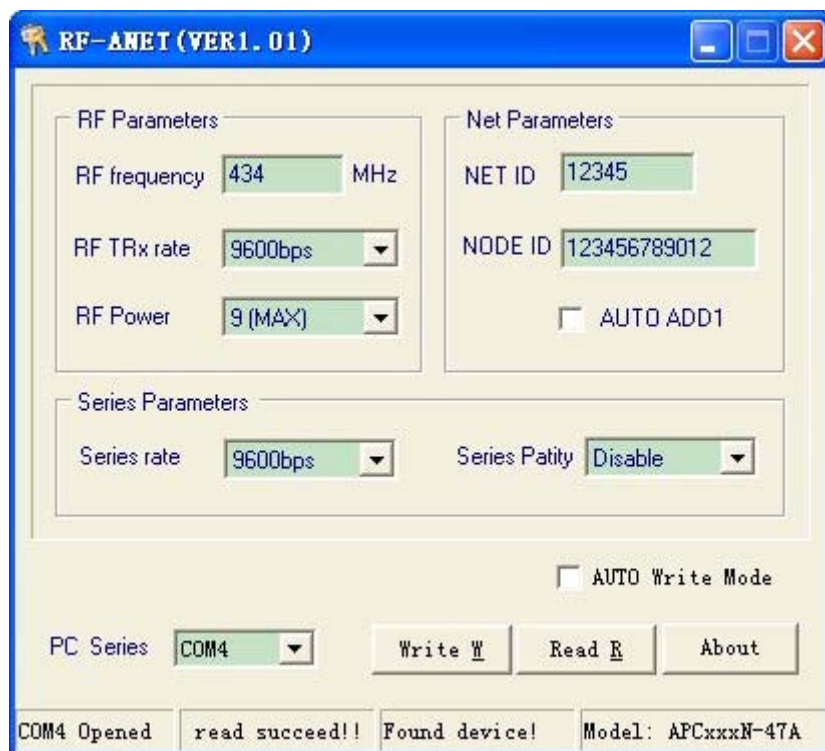


- 4.- Open the setup program "RF-ANET" that you previously downloaded. CP2102 will find the default serial port "COM87". However, RF-ANET can not open the port.



- 5.- In the Device Manager, set the serial port to COM4 or a similar free one (on most modern computers COM 1 & 2 aren't in use) , re-insert the USB adapter and open RF-ANET, click the "Read R" button. Everything should be alright if the status bar displays "read succeed!" which means you are able to communicate with the APC220.

If you are still having problems starting the program, right click on the \*.exe file and select "**Open as Administrator**". A file called netsetup.ini should be created containing the settings.



6.- Change "RF TRx rate" to 19200bps and "Series Rate" to 57600bps. Then press Write, "write succeed!" should appear.

7.- Do the same for the other wireless module.

8.- Connect the wireless module like that to your flight controller:

MODULE-----SEEDUINO/FLYDUINO/ARDUINO/BLACK VORTEX

TX-----RX3 Serial #3 port

RX-----TX3 Serial #3 port

VCC-----5V VCC PIN

GND-----GND PIN.

9.- In the Mission Planner change the baudrate to 57600bps and select the correct COM port.

10.- Push connect and..... It Workssssssssssssssssssssss.

**Notice:** In most European countries you need to select 433MHz as RF frequency since everything above is restricted and you need a amateur radio license.