

## Operational Description

The transmitter of the EUT (Wireless Mini Size USB Adapter) is powered by notebook. The antenna is Metal L Type antenna and Patch antenna. There is no antenna connector for Metal L Type antenna, while Patch antenna uses MMCX connector. Under normal operating condition, the user has to keep at least 20cm separation distance away from the radiator.

For more detailed instruction, please take a look at the user's manual.

### DSSS Information

This device is Direct Sequence Spread Spectrum, the data is mixed by pseudorandom code which is an orthogonal code. The mixed data is digital modulated by BPSK and QPSK technique depends on the data rates.

The CCK coding is applied for increasing the data rate, and also the processing gain will be increased. The bit rates are 1,2,5.5,11Mbps, the symbol rates are 1,1,1.375,1.375Mbps, the chip rates are always 11Mbps.

So, the Chip/symbol is 11,11,8 and 8 respectively. Although the bit rate is higher, the processing gain is lower than 10, but the CCK coding used in higher bit rate will provide 2.2dB coding gain.