

## Operational Description

This device is a Wireless Serial Server which operates in 2.4 GHz band with DSSS technique. The transmitter of the EUT is powered by AC adapter. The antenna is Dipole antenna with SMA Reversed Connector. Under normal use condition, the user has to keep at least 20 cm separation distance between radiator and the body of the user.

For more detailed instruction, please refer to the user's manual.

### DSSS Information

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 is higher bit rate, the processing gain is lower than 10, but the CCK coding used in higher bit rate will provide 2.2dB coding gain.