

MODULATING SIGNAL DESCRIPTION

The Bluetooth LE protocol uses Gaussian Frequency Shift Keying (GFSK) and Frequency Hopping Spread Spectrum (FHSS) in order to ensure integrity and security of the transmitted signal. Although it occupies the 2.400-2.4835 GHz bands, it actually transmits on 40, 2 MHz channels, hopping between channels in a pattern known by the transmitter and receiver, so the actual signal bandwidth is lower than the 83.5 MHz of available bandwidth.