

MOD1UWB Modular radio operational description

The MOD1UWB transmitter module is a standalone radio module which can be attached to various circuits. It is a low powered ultra wideband (UWB) radio module operating on two 500 MHz bandwidth channels with center frequencies of 3.5 GHz and 4 GHz. The RF output of channel 1 is from 3.15 GHz to 4.0 GHz. The RF output of channel 2 is from 3.48 GHz to 4.46 GHz. The center frequency is software controlled. The module is powered by 3.3VDC and has a fixed antenna mounted on the module. This antenna cannot be replaced or removed.

The UWB radio module is primarily used for ranging to other UWB radios. However, it can be used to relay data as well. Range of the UWB signal is approximately 125 feet line of sight.

An external MCU is required to control the module and the default FCC approved channels are set by the manufacturer and cannot be changed by the user.

The module cannot be sold as a module only due to the limited modular FCC approval.