



OPERATIONAL DESCRIPTION – ADDENDUM

(2x2 Radio Module)

The following describes the software control used to ensure output power remains below the appropriate output power and eirp limits when multiple modules, co-located in the same host system, are operating in the same bands.

The system software monitors the output power of each radio to control output power in each band. It also monitors the operating frequencies of each radio to ensure only non-overlapping channels are used, blocking access any channels (5GHz bands) or overlapping channels (2.4GHz band) already being used by a radio.

When more than one radio is operational in the 5150- 5250 MHz band then the maximum output power of each radio is reduced to ensure that the total power in the band remains below 17dBm and the eirp remains below 23dBm.

When more than one radio is operational in the 5250- 5350 MHz or 5470-5725 MHz bands then the maximum output power of each radio is reduced to ensure that the total power in the band remains below 24dBm and the eirp remains below 30dBm.

In the 5.8GHz band the output power is reduced on any radios operating in HT40 mode when there are 2 or more radios operating within the band to maintain compliance with the EIRP limit of 36dBm. For all other modes no power reduction per radio is required as, with 5 radios operational at the maximum rated power for those modes, the total power and eirp remain below 30dBm and 36dBm respectively.

No power reduction per radio is required in the 2.4GHz band as, with 3 radios operational at the maximum rated power the total power and eirp remain below 30dBm and 36dBm respectively.

Test data submitted with the application verifies that the system is capable of operating with the dynamic range in output power required to allow multiple radios to operate in the different bands. The power settings and power levels are detailed in a separate document.