

Equipment Authorisation Division
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

FCC ID: Y9M-KA500E
Product Name: KA-500e

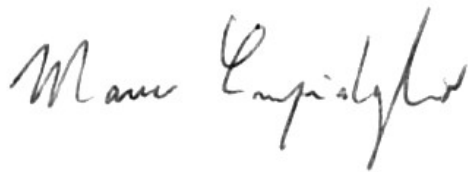
Object: Part 90.203(j)(5) Spectrum Efficiency

“Applications for Part 90 certification of transmitters designed to operate on frequencies in the 150.8-162.0125 MHz, 173.2-173.4 MHz, and/or 421-512 MHz bands, received on or after January 1, 2011, must include a certification that the equipment meets a spectrum efficiency standard of one voice channel per 6.25 kHz of channel bandwidth. Additionally, if the equipment is capable of transmitting data, has transmitter output power greater than 500 mW, and has a channel bandwidth of more than 6.25 kHz, the equipment must be capable of supporting a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth.”

The PMR digital transceiver/repeater model KA-500e is designed to work in dual mode analog and digital mode, for both voice and data service.

In digital mode it works in standard DMR mode: it transmits 2 channels in 12.5 kHz of bandwidth, with a spectral efficiency of 6.25kHz of bandwidth per channel. The 2 channels can be both voice, or both data, or one voice and one data. The bitrate in DMR mode is 9.6kbps in any case.

Sincerely,



Printed name: Mauro Campidoglio

Date: 26/06/2024