

Persistent Inquiry Approval - General Geolocation Description

Wave-MLO6 is designed as an outdoor-only WiFi access point/station, primarily used in long range Point-to-Point (PtP) communication scenarios. Utilizing WiFi7 multi-link operation (MLO) to combine 5 GHz and 6 GHz spectrum for maximized throughput. The device is typically installed on rooftops or towers with line-of-sight condition for optimized performance at a fixed location.

The device integrates with a **GNSS module - EVA-8M** (designed by u-blox), which can provide reliable and accurate geolocation and height data. We select EVA-8M for its ability to deliver precise position and altitude measurements with support for **GPS** satellite system, ensuring compliance with FCC regulations. The location and height uncertainty, with a confidence level of 95%, will be provided in the Geolocation Justification Report.

This geolocation data is automatically acquired and used by the device to interact with FCC AFC system on daily inquiry, determining the allowed 6 GHz channels and power levels to ensure no effect on the incumbent 6 GHz links.

Two main usages of GPS for Wave-MLO6:

1. Provide geolocation and height data for daily AFC Inquiry, to keep the available 6 GHz channel list and permitted EIRP updated.
2. Coordinate transmitting timing between co-located Wave-MLO6 devices by leveraging GPS time synchronization, which helps reduce interference among devices.