

## **Cambium 450V SM 6 GHz Persistent Inquiry Approval (PIA) Geolocation General Description**

### **Geolocation General Description**

1. Cambium 450V SM GHz Devices are outdoor fixed wireless devices which are Standard power Access point or a Fixed client. The geolocation data for Cambium 450V SM 6 GHz devices shall be obtained from an internal GPS SOC. This designated internal GPS SOC is on each Cambium 450V AP 6GHz Device unit using the UBlox solution. The internal SOC is connected to an external GPS antenna. The internal GPS SOC picks up GPS satellite radio frequencies, and calculates its location based on at least 4 satellites. Cambium 450V SM 6 GHz devices will use GPS 3D-Fix mode to retrieve the geolocation information. This geolocation includes longitude, latitude, and height. Cambium 450V AP 6GHz device uses UBLOX NEO-M9N which incorporates a complete set of components, Notch filter, SAW filter, LNA and UBX-M9140-KB including external Cirocomm -SP03Bb15610-1070 GPS antenna to obtain geo-location.
2. Cambium 450V AP 6 GHz GPS SOC and internal GPS antenna will provide geolocation accuracy with a 95% confidence level. This statistical test data to justify the accuracy is provided in the test report F2380235-01 tested by Sporton Lab, Taiwan.
3. Cambium 450V 6 GHz provides daily confirmation and updates to the AFC every 24 hours and repeats AFC requests after each power cycle. This will be performed through AFC re-authorization. AFC authorization/re-authorization will only be performed after the GPS geolocation 3D-Fix mode is obtained for every Cambium 450V AP 6 GHz outdoor device's power cycle procedure or AFC 24-hour daily confirmation re-authorization. Radio Frequency will Not be transmitted without AFC authorization and geolocation obtained from the Cambium ePMP 6 GHz outdoor device's Internal GPS parameters.