Kymeta™ u8 Antenna Software Release Notes

Software release: 2.0.0.149

700-00136-000 revE

2 November 2020

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1 About this document

This document covers the following information on Kymeta™ u8 antenna software release 2.0.0.149:

- u8 antenna software features
- u8 antenna software known issues

This document does not include areas or factors that Kymeta cannot influence, such as network provider's outages, restrictions, etc.

2 u8 antenna software features

The following sections describe the software features available in the Kymeta u8 antenna software release 2.0.0.149:

2.1 Pointing and tracking features

1. Acquisition and tracking support for symbol rates from 1 Msps to 105 Msps.
2. Acquisition and tracking support for DVB-S2 and DVB-S2X waveform modulation schemes with roll-off factors of 5%, 10%, 15%, 20%, 25%, and 35%. Default is 20%. Software configuration is available to adjust roll-off.
3. Acquisition and tracking on sidelobes is mitigated and does not require a manual scenario-specific configuration; automatic mitigation may be disabled via request to Kymeta customer support.
4. Algorithmic control of cross-polarization discrimination and tracking accuracy while under motion and throughout intermittent blockages, such as driving past trees or similar.
5. General support for acquisition and tracking with OpenAMIP 'C' messages.
6. Viasat CBM-400 modem support with profile – see *700-00139-000 Kymeta u8 antenna software user guide* for additional instructions.
7. Persistent orientation estimate enabling fast acquisition after reboot or power cycle.

2.2 Satellite polarization skew support

1. Support for automatic satellite polarization skew via OpenAMIP using the third parameter of the 'S' message.
2. Ability to disable automatic satellite polarization skew via REST API or the antenna web-based UI.
3. Support for satellite polarization skew via REST API or the antenna web-based UI.

2.3 Monitoring and control features

1. BUC monitoring and control in the antenna web-based UI.
2. Click-through web-based UI to BUC and embedded satellite modem for u8 terminal configuration.
3. Informational status LEDs (antenna, modem, multi-WAN).

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4. Modem/multi-WAN status in the antenna web-based UI for u8 terminals.
5. Support for OpenAMIP modems (see *700-00129-000 Kymeta™ u8 terminal satellite network operator guide*).
6. User configurable system power limits.
7. Integrator API.
8. New Kymeta™ Access mobile application integration.

2.4 Token-enabled features

1. Support for External GPS mode with certificate.
2. Support for Full Privacy mode and Manual Position mode with certificate.
3. Single Certificate is required for multi-feature certifications.

2.5 Under the hood

1. Self-test functionality for LNB status, multi-WAN, and modem.
2. Security features, including HTTPS, firewall, and secure boot.
3. Automatic thermal protection: when ambient temperatures are outside specified operational range, the terminal can enter automatic shutdown to protect the hardware. Once the system reaches its thermal limit it will shut down and restart. This process will repeat until the system is cooled to an operational temperature.
4. Reboot countdown timer of 21 days, which replaces scheduled automatic reboot functionality and allows a user new flexibility on system reboot behavior.
5. Stability for long-term always-on operation.

3 u8 antenna software known issues

The following sections describe the known issues in the Kymeta u8 antenna software release 2.0.0.149:

3.1 System

1. Terminals using an LNB of lower gain than the LNB supplied by Kymeta (U8ACC-00010-0) experience degraded acquisition performance, particularly when acquiring carriers of less than 5 Msps and less than 1 dB of SNR.
2. Transmit cross-polarization discrimination performance may be degraded when operating at scan angles greater than 60° as compared with operation at scan angles of less than 60°.
3. In a terminal configuration, the antenna web-based UI and status LED reports ERROR for multi-WAN status until multi-WAN has completed boot.
4. Self-optimization takes longer than the u7 antenna.
5. In an external tracking receiver configuration, if composite power is not provided by the OpenAMIP C-message, RX optimization fails.

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3.2 Software

1. The embedded satellite modem UI and u8 antenna web UI do not properly function with Google Chrome or Microsoft Edge browsers. Kymeta recommends using Mozilla Firefox when accessing antenna and modem web-based UI.
2. Multiple web-based UI instances cause degraded performance. Close any un-needed web-based UI tabs to improve antenna performance.
3. In an ODU configuration, click-through to BUC UI may not function through a third-party switch or device. Use direct Ethernet connection to the u8 to access the BUC UI.
4. During the transitions to and from Standard Time, a 1-hour discrepancy occurs between antenna reboot and the time shown in the **Auto-Reboot** countdown timer; reboot occurs after 21 days of uptime while the countdown timer shows a value different by one hour.
5. The **Next Satellite** button under the **Pointing** tab is not functional.
6. In an ODU configuration, the BIST reports “modem temperature” in the “interface board” tests, though no embedded modem is present.

4 Customer support

Contact Kymeta customer support at support@kymetacorp.com or **1-855-525-6638** (Monday to Friday, 07:00-18:00 PT (UTC-8)) or contact your Kymeta CES representative via email.

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