AdhereTech

Operational Description for Device
Data for FCC
Revision 2

The AdhereTech Smart Pill bottle is a device intended to generate alerts and reminders for pre-determined medication dosing schedules. The device uses LTE Cat M1 technology in the bands 2, 4, and 12 via connectivity provided by a U-Blox SARA-R412M-02B LTE module and the AT&T network in the USA. The device is in a sleep state for 99% of its life and only powers on and connects very infrequently to deliver small packets of data. The device powers on, connects, and powers down as a function of two data events:

1. Auto check-in, and
2. Dose event.

For any given medication dose schedule (1, 2, or 3 doses per day) the device will perform one auto check-in event and one dose event. The Auto checkin is scheduled by the device using an internal real-time clock and the dose event is triggered by the user opening and closing the bottle cap.

In a worst case scenario there could be two data events in a 30 minute window. This would be one auto check-in and one dose event (i.e. the bottle has an auto check-in and then the user opens the bottle within 30 minutes). During any given data event the device transmits for no more than 3 seconds (one second for cell tower registration and two seconds to deliver and receive 1 packet of data equal to no more than 2KB).

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