Operational Description

This wireless electronic door lock contains the following radio components.

BLE – TI CC2640

The BLE radio is the peripheral and is normally in advertising mode. The user can make a connection to the BLE radio with a third-party device, such as a mobile phone. While connected the user can access the lock functionality. In most use cases the BLE radio is used to commission the lock to WiFi network. The user also has the option to use BLE only mode where the lock functionality is accessed via a BLE connection.

WiFi - TI CC3120

The WiFi radio is a client that normally will be connected to a home network router. If the user selects to use the WiFi in a persistent connection mode they will have real time access to the lock functionality via an internet connection. The user can also use the WiFi in Eco Mode where a network connection is only established when there is activity at the lock, and periodically when the lock will connect to the network and check the cloud for commands.

The WiFi radio supports 802.11 b/g/n SISO in the following modes

802.11b (1 Mbps up to 11 Mbps), Channels 1 through 11 (USA+CAN)

802.11g (6 Mbps up to 54 Mbps), Channels 1 through 11 (USA+CAN)

802.11n (MCS0 through MCS7), Channels 1 through 11 (USA+CAN)