

Similarity letter

These door readers were designed to transition users from traditional plastic RFID cards to mobile credentials, using BLE (Bluetooth) communication and a mobile phone with a Safetrust APP. The RFID access data is embedded with a mobile APP and transmitted when a user approaches a door for access. The readers employ WIFI to enable remote configuration and firmware updates through our portal, eliminating updates at the reader.

All three readers contain a mother board and a daughter board. The mother board containing WIFI 5.8 GHz, BLE Main, and BLE MESH is identical for all three readers. The daughter board contains the antenna (LF, HF and BLE Receiver) and LEDs. All three daughter boards have the same base functionality. The two boards have a M/F connector which bring power to the main board. The daughter board varies in size based on the form factor of each housing. The mullion is for mounting on the mullion of a door and Wall Mount mounts on an electrical box. The keypad adds buttons to send individual PIN data. Using multiple BLE chips we can create a BLE MESH enabling the reader to determine the location of the user in relationship to the reader.

Within this reader design block diagram there are references to RFID. The RFID design, which supports both 125kHz and 13.56MHz, is designed to support legacy plastic credentials, permitting users the ability to use mobile or plastic credentials for building access. The tune-up power tolerances for BLE are 0dBm +1dB / -5dB, and WLAN (5.8G): 9dBm +1dB / -3dB.

	Mullion	Wall-Mount	Keypad
Model	SA510	SA520	SA530
FCC ID	2ANI5SA510	2ANI5SA520	2ANI5SA530
IC ID	23133-SA510	23133-SA520	23133-SA530
Dimension	11.8 X 4.3 X 2.8 cm	11.8 X 7.8 X 2.8 cm	11.8 X 7.8 X 2.8 cm
Housing	mounting on the mullion of a door	mounts on an electrical box	Adds buttons to send individual PIN data
Mother Board	WIFI 5.8GHz BLE Main / BLE MESH	WIFI 5.8GHz BLE Main / BLE MESH	WIFI 5.8GHz BLE Main / BLE MESH
Daughter Board (Antenna Board)	LF, HF, BLE Receiver	LF, HF, BLE receiver	LF, HF, BLE Receiver
Keypad	X	X	Support
No. of receiver ant. For BLE Mesh	4	4	5
Loop ant size of RFID HF (W x D)(mm)	Approx. 34 X 94	Approx. 68 X 100	Approx. 68 X 100