



RFGate RGW21 WiFi MQTT Access Control Unit

Introduction of Product

By using our RGW21 Wiegand gateway, navizard RTLS system can cooperate with several technics via same interface. so that it can integrate these technics into its platform to make it easier to follow in several ways :

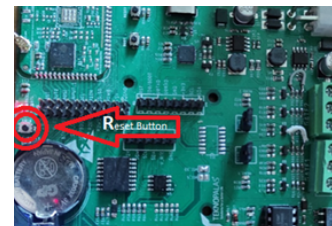
- HF/UHF RFID Cards
- Active Tracking Tags
- Fingerprint
- QR code
- Barcode
- Face Recognition
- Iris
- The voice

The feature of Wi-Fi connectivity has been added to our developed Wiegand Gateways. This provides the following; we support two readers that can give us two outputs. We can connect any device with Wiegand output (fingerprint reader, HF/UHF card reader, face recognition device, UHF RFID reader, QR code reader or any international standard 32bit Wiegand output device through two readers.

Hardware Components

The system consists of 7 main IOs :

1. **2 outputs (Dry Contact Outputs)** to control the access gates,
2. **1 input** if we want to add release button in one side of the door
3. **2 input gates** to receive the readings from the readers,
4. **1 12V power input**
5. **Reset Button**
 - a. Keep pressing the button for 3 seconds, it will change to access point mode.
 - b. Keep pressing the button for 5 seconds, it will reset all user configurations to default values.



Categories

Categories	Items	Specifications
Certification	Bluetooth certification	BQB
WiFi	Protocols	802.11 b/g/n (802.11n up to 150 Mbps)
	Frequency range	A-MPDU and A-MSDU aggregation and 0.4 μ S guard interval support
		2.4 – 2.5 GHz
Bluetooth	Protocols	Bluetooth V4.2 BR/EDR and Bluetooth LE specification
	Radio	NZIF receiver with -97 dBm sensitivity
		Class-1, class-2 and class-3 transmitter
		AFH
Audio	CVSD and SBC	
Hardware	Module interfaces	ADC, DAC, touch sensor, SD/SDIO/MMC Host Controller, SPI, SDIO/SPI Slave Controller, EMAC, motor PWM, LED PWM, UART, I2C, I2S, infrared remote controller, GPIO, pulse counter, Two-Wire Automotive Interface (TWAI, compatible with ISO11898-1)
	On-chip sensor	Hall sensor
	Integrated crystal	40 MHz crystal
	Integrated SPI flash	4 mb
	Operating voltage/Power supply	3.0 V - 3.6 V
	Operating current	Average:80 mA
	Minimum current delivered by power supply	500 mA
	Operating temperature range	-40 °C to 85 °C
	Power	Input Power 12 V
	RTC (Real Time Clock)	Uses for offline LOGs

Benefits

- They are more effective, space-saving devices instead of antennas, Cables or large devices.
- High performance, It does not require cables for communication. It uses Wi-Fi.
- Practical, an embedded antenna is used for Bluetooth. Thus, there is no loss of power and distance.
- Provides instant information.
- Easy to setup.

Gains

- **Time** : Saving time is achieved by speeding up the signal reception from the equipment times, making statistics and monitoring it.
- **Labor** : With the Wi-Fi network, data transfer is provided without connecting to human factors.
- **Speed** : The data transfer is accelerated by instant communication of the devices.
- **Efficiency** : The system has standalone feature. It can work even if the connection to the server is interrupted.
- **Price** : The price of the system is very competitive compared to similar systems.