TB2I

802.11 b/g/n high-performance bridge for elevator application

TDMA

Intelligent Rate Control

ACK Time-out Adjustment

2x2 MiMo

High Throughput

Point-to-point

Hardware Watchdog

POE+

Release Notes

Date	Version Number	Editor	Change log	Remarks
2020-04-16	V1.0	Guifang	Create	
2020-11-19	V1.1	Guifang	Modify power consumption	

Product Feature

- Supports 802.11 b/g/n standard
- The highest transmission rate is 300Mbps
- Indoor transmission distance: 0~500m
- Integrated antenna, quick installation
- Built-in VTrans technology, including

  1) TDMA: eliminate the performance degradation caused by hidden terminals and maximize the wireless transmission efficiency

  2) Frequency (channel) expansion function: eliminate interference caused by the same frequency and adjacent frequency through more frequency selection

  3) Band width selection: by adjusting the channel width, the overlapping parts of spectrum can be avoided and the influence of interference by other channels can be reduced

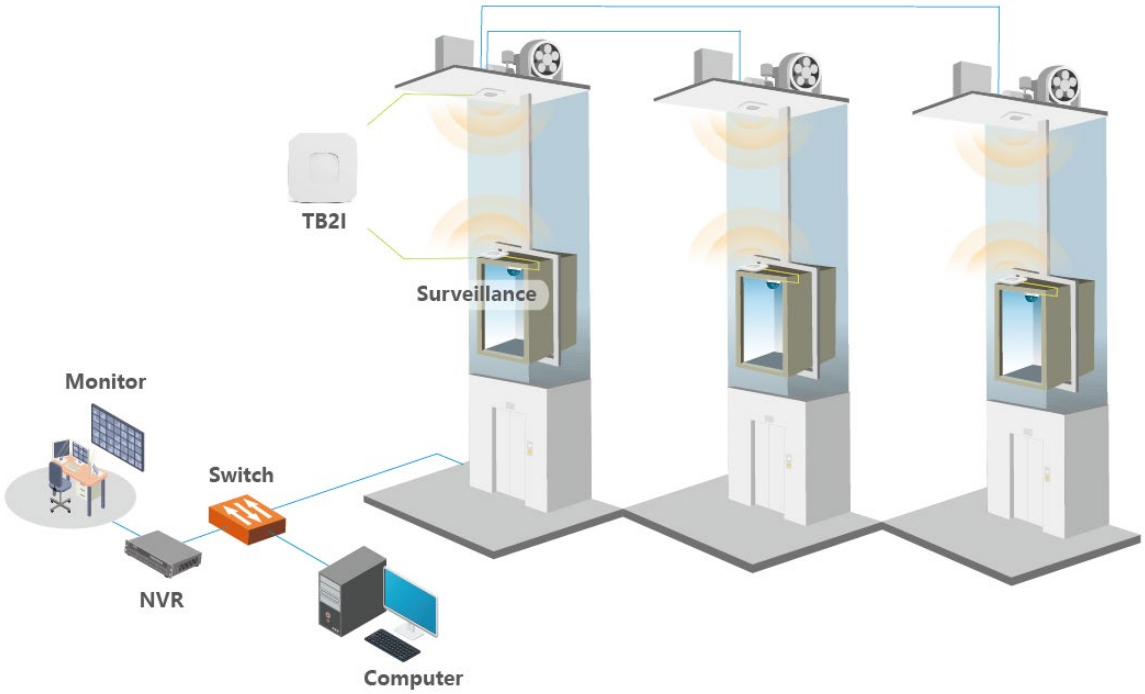
  4) AutoAck function: intelligently calculate the ACK value required for long-distance transmission to achieve the optimal performance at this distance
- Supports bridge and router modes, Network architecture can be flexibly deployed by adjusting the network mode of devices
- Intelligent QoS wireless multimedia optimization technology, providing high priority transmission levels for voice and video
- Supports web page management, making installation and maintenance of equipment more convenient
- Supports wireless controller (AC) management, realize remote centralized configuration and upgrade management
- Supports 802.3at protocol (POE+)
- IP41

*Wireless controller needs to be purchased separately

Accessory List

						
Sender	Receiver	Mount Bracketx2	In wall POE adaptor X2	Zip tiesX4	QIG	QC

Application Scenario



Specifications

Hardware	Dimensions(mm)	150x150x36mm
	Weight(kg)	0.2kg
	Installation	Clamp or cable tie
	Protection Level	IP41
	Antenna Gain	8dBi
	Beam Width	H：65°，V：60°
	Power Supply	48V POE+/DC 12V
	Max Power Consumption(W)	4W
	CPU	QCA9531
	DDR & Memory	64MB DRAM,8MB Flash
	Physical Interface	3*10/100Mbps
	Indicator Light	3* Signal strength indicator
	Maximum Transmitted Power	27dBm
	Working Temperature	-20℃~55℃
	Storage Temperature	-40℃~85℃
	Working Humidity	5%~95%RH Non-condensing

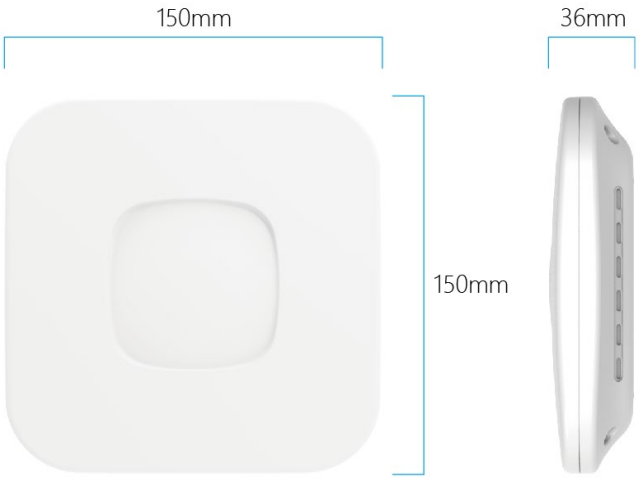
	Surge	POE/GE: CM 4KV , DM 2KV
	ESD Protection	Contact 6KV , Air 8KV
Software	Protocol	802.11b/g/n
	Frequency	2412~2472MHz（China） 2412~2462MHz（United States） 2412~2472MHz（Most countries） Supported frequency range：2312~2732MHz（should depend on the local regulation.） * The above frequencies need specific version support
	Operating Mode	AP, Station, WDS AP, WDS Station
	Security	WPA2-PSK, Hidden SSID, IP/MAC Filtering
	Network Mode	Bridge/ Router
	Management	Support Web/AC/SNMP
	Other	Timed restart，Support VLAN，QoS, Watchdog

RF Specification

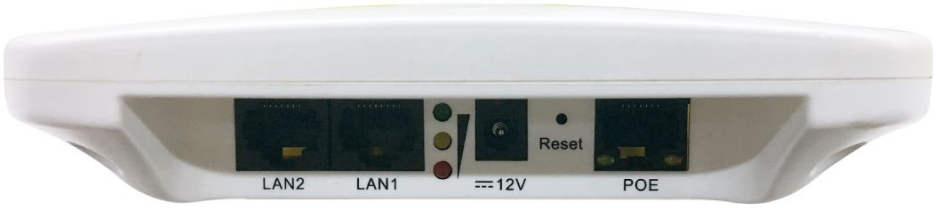
	TX Power			Sensitivity		
	Date Rate	Avg. TX	Tolerance	Date Rate	Sensitivity	Tolerance
11b/g/n	1 Mbps	24dBm	+/- 2dBm	1 Mbps	-96dBm	+/- 2dBm
	11 Mbps	24dBm	+/- 2dBm	11 Mbps	-90dBm	+/- 2dBm
	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-91dBm	+/- 2dBm
	54 Mbps	21dBm	+/- 2dBm	54 Mbps	-76dBm	+/- 2dBm
	HT20 MCS0(combination)	27dBm	+/- 2dBm	HT20 MCS0	-91dBm	+/- 2dBm
	HT20 MCS7(combination)	23dBm	+/- 2dBm	HT20 MCS7	-73dBm	+/- 2dBm
	HT40 MCS0(combination)	27dBm	+/- 2dBm	HT40 MCS0	-88dBm	+/- 2dBm
	HT40 MCS7(combination)	23dBm	+/- 2dBm	HT40 MCS7	-70dBm	+/- 2dBm

* The combined power in the chart above is the result of tested single power plus 3dB

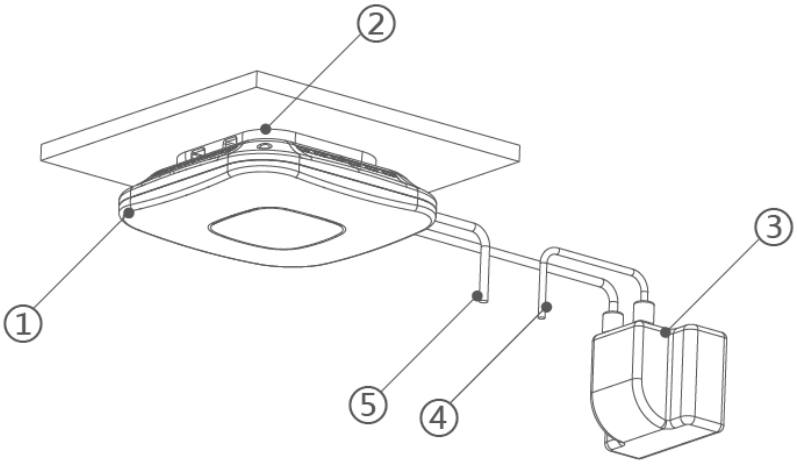
Dimensions



Interface



Installation



1. Wireless Transmission Device
2. Mounting bracket
3. POE Adaptor
4. The LAN port of POE adaptor can be connected with the other devices
5. The LAN1/LAN2 port on the main device can be connected with the other devices

*The actual installation height needs to be determined according to the transmission distance and the installation environment, and there is no obstruction between the two points.

Antenna Polar Plots

Horizontal	Vertical