

# TB5J

802.11a/n/ac 5G Outdoor Wireless AP  
Internal 15dBi Antenna



TDMA



Intelligent  
Rate Control



ACK Time-out  
Adjustment



2x2 MiMo



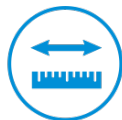
High  
Throughput



PTP



PTMP



Long Distance  
Coverage



Gigabit  
Ethernet



Hardware  
Watchdog

# Long Range, Robust Wireless Connection

## Summary

TB5J is a new generation of industrial grade 802.11ac 2x2 AP for outdoor applications. It can provide stable outdoor wireless signal coverage and long distance wireless backhaul, and provide customers with stable, high quality, convenient broadband services.

TB5J built in CreatComm's unique VTrans wireless technology, the technology combines industry-leading core technology, including MIMO-OFDM, TDMA, Beamforming, AutoACK, etc., to ensure high throughput and reliable wireless signal coverage under various application scenarios.

Product structure design fully consider harsh environment applications, and comply with the IP66 standard, also has the mould proof, corrosion resistance lightning protection and other characteristics. So the TB5J can be deployed in the harsh environment for almost any condition.

## Product Feature

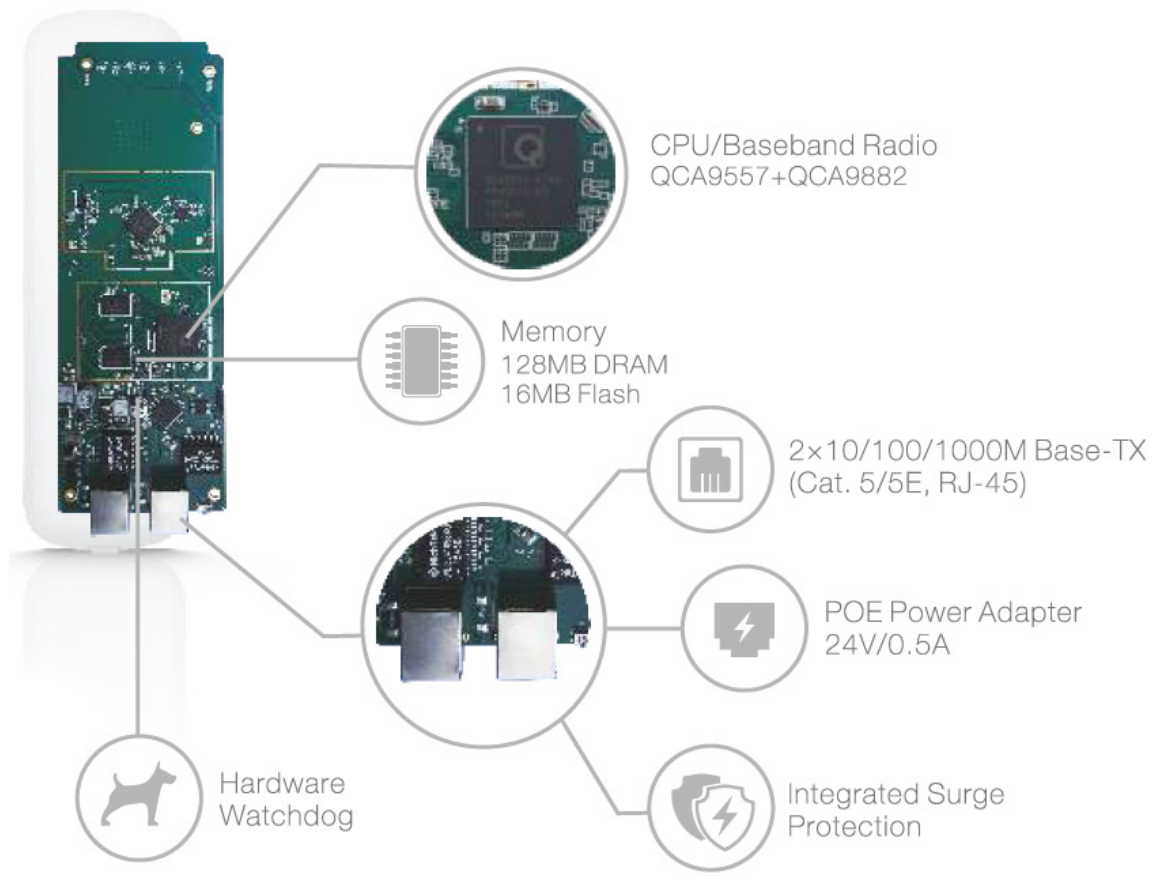
- Support 802.11ac standard, and 2x2 MIMO technology
- Longest transmission distance 0~5Km. Max transmission throughput 867Mbps
- Integrated VTrans technology
- Support multiple operation modes: AP, Station, WDS AP, WDS Station, WDS Repeater
- Support point-to-point, point-to-multipoint connection
- Unique RF and antenna design enables long-range transmission
- Multi-hop technology support several devices to form a relay link, adapt to complicated terrestrial environment
- Wireless multimedia optimization technology guarantees video/Traffic shaping
- Support wireless load balancing
- Support dual backup firmware
- Web based working scenario selection makes the installation and setting much easier
- Support remote configuration and upgrade management by AC
- Support SNMP

# Product Introduction

## Industrial Leading Design

The TB5J has the industrial leading technology, owing the performance capability of a wireless base station with only a small form factor, furthermore, it has very attractive low cost.

The TB5J complies with the 802.11ac standards, can provide up to 867Mbps throughput and have a greater range of the wireless signal coverage than the traditional AP more than nearly 50%.



## VTrans Integrated System

- VTrans utilize the most advanced technologies
- TDMA technology can solve the problems of hidden-node problem in the 802.11 network; improve PTMP performance and wireless bandwidth efficiency and noise immune performance.
- MIMO can improve wireless data rate and signal quality.
- 10/20/40/80MHz bandwidth can be flexibly configured by the users.
- Auto ACK Time-out adjust, can automatically detect the distances of the TB5J devices.
- Intelligent rate control algorithm can be adapted to quick channel quality variations.
- Configure the WiFi as WAN or LAN port.



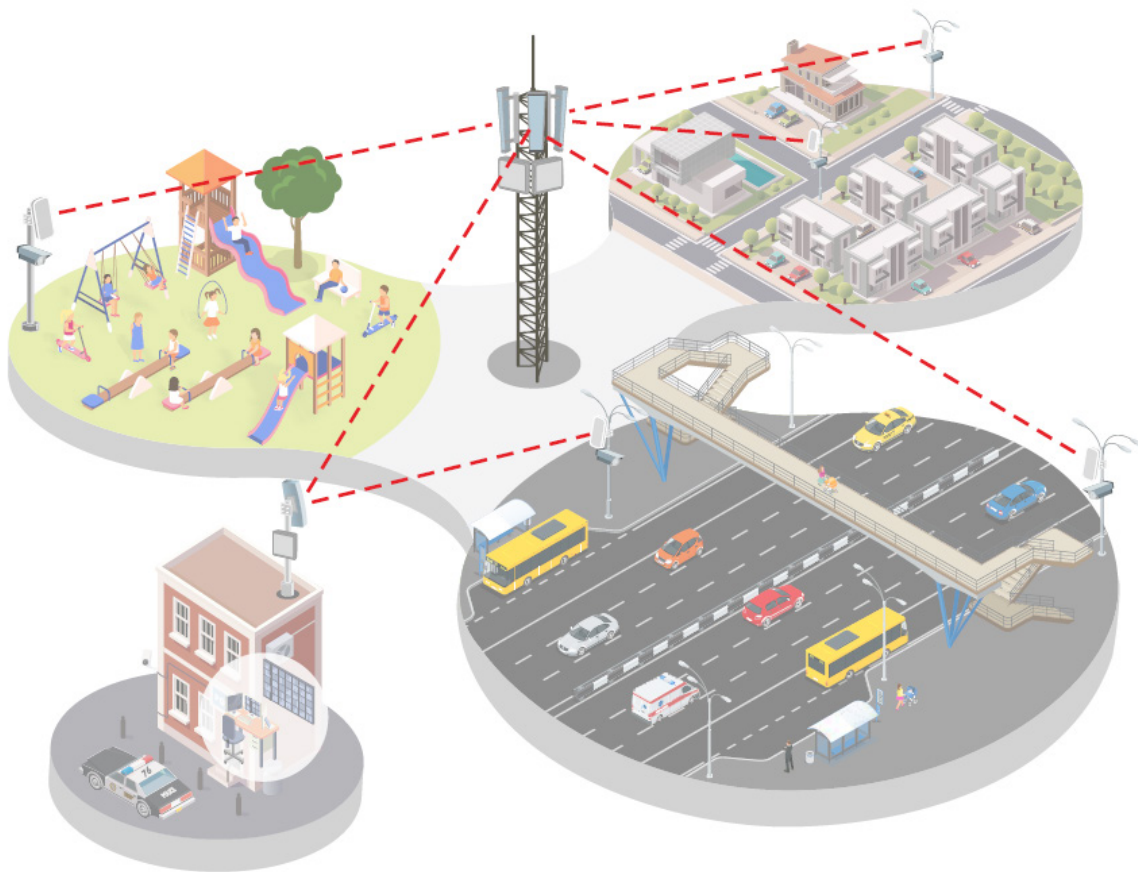
## Convenient Relay System

- Device can be configured as Relay topology between the origin and destination
- Without the need of line-of-sight, thus adapt to complicated terrestrial environment
- The transmission path doesn't need to be a straight line
- Relay devices can be set manually conveniently.

## POE

- Those features are suitable for outdoor long range applications
- POE removes the need of device power supply
- POE enables remote reset of the device from power supply location

## Application Scenario



## Specifications

Hardware Specifications	
CPU/Baseband Radio	QCA9557+QCA9882
Memory	128MB DDR2,16MB Flash
Physical Interface	2×10/100M /1000MBase-TX (Cat. 5/5E, RJ-45)
Power Requirement	24V POE

Software Specifications	
Protocol	802.11a/n/ac, TDMA
Operation Mode	AP, Station, WDS AP, WDS Station, WDS Repeater
Networking	Bridge, Router
Operating Frequency	5180~5825MHz(More Non-standard channels are available,4920~5915MHz)
Security	WPA/WPA2, Hide SSID, IP/MAC Filtering
Configuration	Web-based configuration, AC Management, SNMP Management
Firmware Update	Firmware update via browser or AC

Physical/Electrical/Environmental/Antenna/Certification	
Enclosure Characteristics	Outdoor PC enclosure
Mounting Kit	Pole Mounting Kit
Working Temperature	-40°C to 70 °C
Storage Temperature	-40 °C to 85 °C
Dimensions	288×88×45mm
Weight	2.5kg
Max Power Consumption	<=15W
Antenna Gain	15dBi H 40° V 15°

RF Index							
TX Power Specifications (2T2R)				RX Sensitivity Specifications			
	Date Rate	Avg. TX	Tolerance		Data Rate	Avg. TX	Tolerance
11a	6~24Mbps	27dBm	+/- 2dB	11a	6Mbps	-91 dBm	+/- 2dB
	54 Mbps	24 dBm	+/- 2dB		54 Mbps	-74 dBm	+/- 2dB
11n	MCS0~3	27dBm	+/- 2dB	11n	MCS0HT20	-91 dBm	+/- 2dB
	MCS7	23 dBm	+/- 2dB		MCS0HT40	-88 dBm	+/- 2dB
	MCS8~11	27dBm	+/- 2dB		MCS7HT20	-74 dBm	+/- 2dB
	MCS15	23 dBm	+/- 2dB		MCS7HT40	-71 dBm	+/- 2dB
11ac	MCS0~3	27dBm	+/- 2dB	11ac	MCS0HT20	-90 dBm	+/- 2dB
	MCS9	21 dBm	+/- 2dB		MCS9HT20	-67 dBm	+/- 2dB
	MCS10~13	27dBm	+/- 2dB		MCS9HT40	-64 dBm	+/- 2dB

## Ordering Information

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