



CONNECT EACH GLOBAL REACH

G3 Multi-Antenna Gateway --- Specification



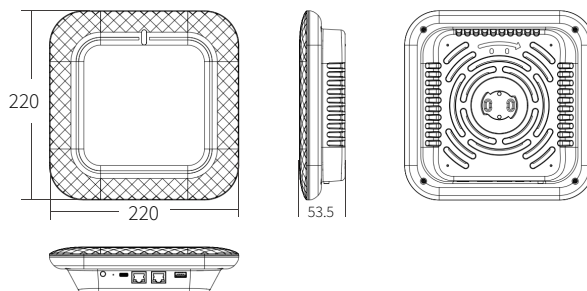
Brief Introduction

The Minew G3 Multi-Antenna Gateway is designed for the mid-to-high-end IoT market, serving enterprise users, smart parks, industrial automation, and other scenarios with high-performance, high-reliability IoT connectivity solutions.

Equipped with a high-performance dual-core processor, the device supports edge computing for local data processing, reducing server load and improving overall system efficiency. It features a Gigabit Ethernet port and 2.4GHz/5GHz dual-band Wi-Fi bridging for flexible network deployment. The built-in multi-channel Bluetooth antennas enable concurrent management of a large number of Bluetooth devices, making it ideal for batch configuration and rapid data updates of electronic shelf labels. PoE cascading support reduces reliance on switches and lowers deployment costs. The integrated USB interface allows connection to a cellular network adapter for fast data upload over an LTE network, meeting real-time data transmission requirements for outdoor and unwired deployment environments.



• Appearance



• Product Dimensions

Highlight



High-performance
Dual-core Processor



Gigabit Adaptive
Ethernet Port



2.4GHz & 5GHz
Dual-band Wi-Fi



10-channel Bluetooth
Concurrent Connection



Optional Type-C /
PoE Power Supply



PoE Cascading



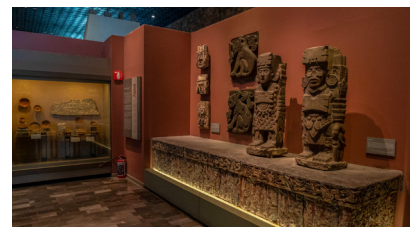
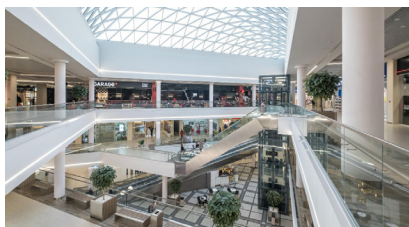
Supports USB Dongle
or USB Flash Disk



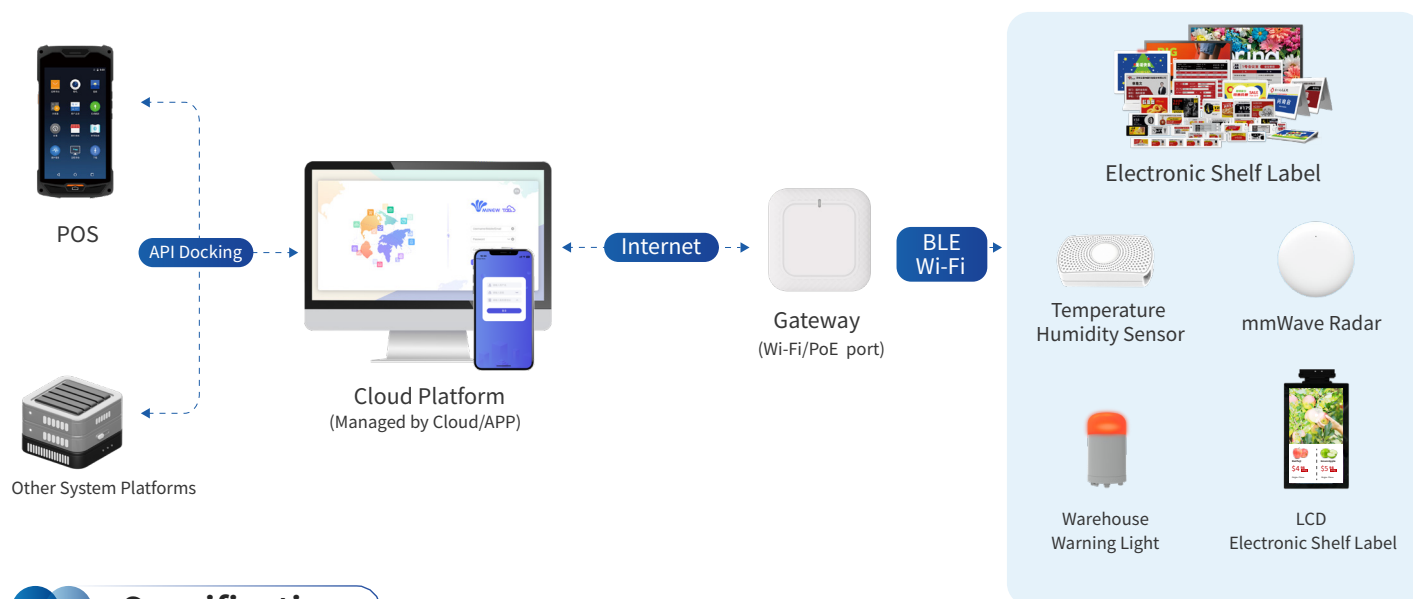
Adaptable to
Complex Scenarios

Application Scope

Applicable to supermarkets, factories, warehouses, airports, exhibition centers, museums and scenic spots; widely used in electronic shelf label management, personnel control, asset inventory, environmental monitoring, indoor navigation, smart security and remote monitoring.



Logical Architecture



Specification

Structural Parameters

Dimensions	220*220*53.5 mm
Material	AC3100
Color	White
Weight	892.8 g(Including Bracket)
Buttons	Power Button *1; Reset Button *1
Ports	POE-IN/ WAN *1; POE-OUT/ LAN *1; TypeC *1; USB-A *1
Indicator Lights	RGB Light *1
Installation Method	Ceiling Mount, Wall Mount, Desktop Placement
Accessories	Mounting Base, Expansion Screws

Electrical Parameters

Item	Parameters	Notes
Main Controller	MT7981B	
Bluetooth Module	NRF52840*10	
Memory	DDR3 256MB ,Nand Flash 128MB	
Power Supply Mode	DC 12V / POE Type 4 802.3 at/bt	
Max Power Consumption	18W	Single Host Non-Cascading
PoE Input	Supports Type 4 802.3bt (91W MAX)	
PoE Output	Supports Type 4 802.3bt (71W MAX)	
RJ45 Port Speed	1Gbps	
Operating Temperature	-15~50°C	
Operating Humidity	5~95%RH Non-condensing	
RGB Light Effect	Boot Loading Process	Purple light flashing
	Boot Completed	Blue light always on
	Network Fault	Red light always on
	Network Normal	Green light always on
	Wi-Fi Firmware Upgrade	Green light flashing
	Brick Recovery Mode	White light always on
	Always Off	Power off; or light disabled by configuration

Radio Frequency Parameters

Wi-Fi Radio Frequency		
Item	Parameter	Notes
Wi-Fi Protocol Standard	MIMO IEEE 802.11 b/g/n/ac/ax	
Wi-Fi Frequency Band	2.4GHz/5GHz	
Wi-Fi Modulation Mode	BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM/DBPSK/DQPSK/CCK	
Channel Bandwidth	20M/40M/80M/160M/auto	
Wi-Fi Transmit Power	20dBm (MAX)	
Wi-Fi Receiver Sensitivity	-98dBm	
2.4G Wi-Fi	2.4G 2 x 2 MIMO 574Mbps	
5G Wi-Fi	5G 2 x 2 MIMO 2.4Gbps	
Number of Spatial Streams	4 x 4	
Overall Wireless Rate	≤2.975Gbps	
Network Protocol	HTTP(SSL / TLS) / MQTT(SSL / TLS) / TCP	
Wi-Fi Encryption	WEP WPA PSK , WPA2 PSK , WPA WPA2 PSK , WPA EAP , WPA2 EAP , WPA3 EAP , WPA3 SAE	
Bluetooth Radio Frequency		
Item	Parameter	Notes
Bluetooth Standard	BLE 5.0	
Bluetooth Frequency Band	2.4GHz, 40channels	2400~2483.5MHz
Bluetooth Receiver Sensitivity	-94dBm (1Mbps) / -91dBm (2Mbps)	
Bluetooth Reception Bandwidth	1Mbps / 2Mbps	
Bluetooth Transmit Power	18dBm	
Number of Received Broadcast Packets	400 pps	Single Channel Scanning Only
Encryption Method	AES-128 bits	
Brush Configuration Distance	Over 30 Meters in Open Area	Results vary for different slave devices

Statement

Declaration of Rights

All contents of this manual are the property of Shenzhen Minew Technology Co., Ltd. and are protected by copyright laws of the People's Republic of China, and applicable international conventions. The Company reserves the right to modify the contents of this manual as required by technological development without prior notice.

No individual, company, or organization may alter or use any part or all of this manual in any form without prior written permission and authorization from the Company; otherwise, violations will be subject to legal liability.

Disclaimer

Shenzhen Minew Technology Co., Ltd. reserves the final right of interpretation for any discrepancies between this manual and the actual product. The Company shall not be liable for any property loss or personal injury caused by improper operation. Please develop, use and maintain relevant products in accordance with the technical specifications and reference designs provided in this manual.



Address: Building I, Gangzhilong Science Park, Qinglong Road,
Longhua District, Shenzhen, 518109, China

Phone: +86(755)2103 8160

Email: info@minewtag.com

Website: <https://www.minewtag.com>

