

# **Datasheet**

**AoA Gateway** 

Light Up Your Map Model: G2



## AoA TECHNOLOGY OVERVIEW

The Angle of Arrival (AoA) positioning technology is a typical ranging-based algorithm across some devices to sense the arrival direction of the transmitting node signal, and calculate the relative position or angle between the unknown node and the anchor node; then use the triangulation or other methods to calculate the location of the unknown node. Compared to other technical types, AoA indoor positioning has advantages of higher precision, larger coverage, better penetration, and easier maintenance at a lower cost.

## **AOA GATEWAY**

The AoA Gateway is the newest & high-accuracy indoor positioning gateway kit designed by Minew for enterprise-level users, based on Minew AoA protocol and AoA positioning technology. It has up to 2152~4305 ft<sup>2</sup> cover-age range and provides a sub-meter positioning service. Besides, providing faster and safer assurance in terms of data transmission even using in the harsh environment.

## **KEY FEATURES**

- -High-Accuracy Location
- -2152~4305 ft<sup>2</sup> Coverage Range
- -Real-time Data Transmission
- -1000+ Data Packet / s Throughput
- -Long Service Life Than Ever
- -AWS / Azure / Google Cloud Compatible

#### **Technical Advantage**

- Stable Chip Supply
- **High-Accuracy Location**
- **Data Transmission Security**
- **Unlimited Frequency Resources**
- Large Coverage Range



Picture 1 Bluetooth® LE AoA High-Accuracy Technology

# MARKET APPLICATIONS



Industry 4.0



Smart Building



Smart Warehouse



Smart Retail



Smart Healthcare



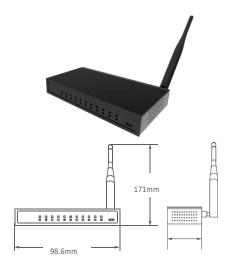
**Smart Sports** 



## **TECHNICAL SPECIFICATIOS**

# **Basic Specifications**

Model	G2
Material	ABS + PC
Color	Black
Size (L * W * H)	98.6 *27.2 *171mm
Weight	398 g
Power supply	DC 12V/2A, POE 51V/0.5A
Output power(Max.)	DC: 2.5W, POE: 3.5W
Network protocol	HTTP (SSL / TLS )/ MQTT (SSL / TLS
	& Proxy ) / TCP
Operating environment	Indoor
Installation	Lay flat or Hang on with screw
Firmware upgrade	OTA available



WiFi Specifications		
WiFi Protocols	IEEE 802.11 b/g/n	
WiFi Frequencies	2.412-2.462GHz	
	802.11n: Up to 300Mbps	
Data Transfer Speed	802.11g: Up to 54Mbps	
	802.11n: Up to 11Mbps	
Transfer Speed	1T1R 150Mbps	
	270M:-61dBm@10%PER	
	135M:-65dBm@10%PER	
	108M:-68dBm@10%PER	
Receiving Sensitivity (typical)	54M:-68dBm@10%PER	
	11M:-85dBm@10%PER	
	6M:-88dBm@10%PER	
	1M:-61dBm@10%PER	
Modulation Mode	DBPSK, DQPSK, CCK and OFDM( BPSK/QPSK/16-QAM/64-QAM)	
Network Protocol	HTTP(SSL/ TLS) / MQTT(SSL / TLS & Proxy) / TCP	
Wireless Encryption	WPA-PSK / WPA2-PSK, WPA-EAP/WPA2-EAP and TKIP	

# **PRECAUTIONS**

- The G2 supports POE cascading power supply and cannot be a normal operation if more than 4 levels of full-load cascading.
- Please contact our sales team if there are other installation requirements.

# **QUALITY ASSURANCE**

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (tests include transmission power, sensitivity, power consumption, stability, aging, etc.).

Warranty Period: 12 months from the date of shipping (Battery and other accessories excluded).

## **DECLARATION**

## **Statement of Rights:**

The contents of this manual belong to the Manufacturer of Minew Technologies Co., LTD, Shenzhen, and are protected by Chinese laws and applicable international conventions related to copyright laws. The contents can be revised by the company according to the technological development without prior notice. Anyone, companies, or organizations cannot modify the contents and cite the contents of this manual without Minew's permission, otherwise, Violators will be held accountable according to law.

#### **Disclaimer:**

Minew team reserves the right to the final explanation of the document and product differences. The Minew group is not responsible for liability of property or personal injury with the wrong operation if users develop related products without checking the technical specifications of this manual.

## **FCC Requirement**

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the F CC Rules. These limits are designed to provide reasonable protection against harmful interference in a residentialinstallation. This e quipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interferencewill not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that towhich the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## CONTACT INFORMATION

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