



# ***AL-020***

## ***Product Guide***

V.1.1

# Product Brief

**Model: AL-020**

***LoRaWAN Indoor Gateway***



# Index

1. Overview .....	4
2. Product Features .....	4
3. Application .....	5
4. Product Specifications .....	5
5. Indoor Gateway Outlook .....	7

## 1. Overview

Abit AL-020 is hybrid LoRaWAN Gateway which can provide the LoRa Concentrator to receive all packets with different spreading factors at fixed frequencies. The Packet Forwarder can redirect packets to the Internet. You can access quickly AL-020 through our Web Portal. You can use modern browsers such as Chrome and Firefox to manage AL-020 to setup network configuration. The followings are AL-020 's software and hardware specification and its front view and right side view.

## 2. Product Features

1. Long range transmission, could be almost 5-6Km ( depends on the interference in the air)
2. Frequency range: 920~928MHz
3. High sensitivity: -136dBm
4. RF power: 13dBm
5. port 10/100Mbps Fast Ethernet
6. Manageable via Web Browser

### 3. Application

1. Automation and safety alarm in the community.
2. Various automated smart meters, such as water meter, gas meter and electricity meter.
3. Long range communication data collection and integration.
4. Outdoor information monitoring and collection, such as temperature, humidity and air quality information.
5. Electricity facilities measurement and management, such as smart street lighting.
6. Agriculture and animal husbandry monitoring and management.

### 4. Product Specifications

SoC	TI AM3352 (Cortex A8)
Voltage	12V 2A
Flash	256Mbyte
Storage	512Mbyte
RF Interface	
Modulation	LoRa
Transceiver	SEMTECH SX1301
Frequency Range	920~928MHz
Data rate	0.24~18.22Kbps
Sensitivity	-136dBm

Network Communication	
Ethernet	10/100Mbps fast Ethernet
Network Interface	Support DHCP, Static IP and DHCP Server
Administration Portal	Support Chrome and Firefox
ANT impedance	For LoRa: 50ohm
Dimension	134 x 85 x 43 (mm)
Operation Temp.	-40~70° C
Storage Temp.	-40~85° C

## 5. Indoor Gateway Outlook

