

Product Brief

LoRa 1CH Single Channel Gateway

Model: TLG8402V1

Ver.:1.5



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TLG8402V1 is a 1CH LoRa gateway that adopts LoRaWAN[®] network solution for receiving data on specified frequency and SF. LoRaWAN[®] is a standard protocol, a Low Power Wide Area Network (LPWAN), it uses ISM band and Internet of Things (IoT) applications. TLG8402V1 is equipped with KiWi TLM922S LoRa module with lots of certificates, it offers LoRa, WiFi 2.4GHz, and optional Ethernet/LTE for various LAN/WAN connectivity. Not only it can connect with cloud service, but provides built-in LoRaWAN[®] N.S/A.S. For WiFi feature, TLG8402V1 supports both AP and station mode, and configuration could easily be done by web browser. It's designed for less quantity sensors indoor wireless transmission applications, i.e. smart retail, and cold chain management.



Product Features:

- LoRa, long-range transmission could be almost 10Km (it depends on the interference in the air)
- Packet forwarding to external LoRaWAN® server
- Manageable via web browser
 - Gateway Setting
 - Device Management
- Built-in LoRaWAN® sever(*) support
- Remote firmware upgrade (FOTA)
- HTTP REST API

Application Scenario: (Max. Node device limited : #20)

Use Case	IoT	Compliance	Scenario
Smart Retail 4.0	Automatic Temperature Monitoring	Food Safety ; HACCP	CVS (Convenience Store) FP (Food Process Plant)
Food Service	Automatic Temperature Monitoring	Food Safety ; HACCP	QSR (Quick Service Restaurant)
Pharmaceutical	Automatic Temperature Monitoring	Medicine Safety	Refrigerator Van/Cold Box

I/O description:

- Power : DC5V Micro-USB power input x1
- Nano SIM Card socket x1 (* with LTE)
- LED indicator x4 (Power / LoRa / WiFi* / LTE*)
- Hardware / Factory reset button x1
- Ethernet RJ45 x1 (*)
- LoRa Antennas x1 (SMA Connector)

Product Specifications:

Item	
SoC	ATSAMD21G
Flash	8 MB
Memory	256 KB (Embedded)
LoRa Protocol	LoRaWAN 1.0.3
LoRa Module	Kiwi TLM922S
LoRa Frequency Range	920.6~928MHz for JPN AS923, US915, EU868, AU915, KR920
LoRa Data Rate	0.292~21.875Kbps
LoRa Sensitivity	-137dBm
LTE Module(Optional)	Quectel EC25 series, default EC25J for JPN LTE FDD: B1/B3/B8/B18/B19/B26 LTE TDD: B41 WCDMA: B1/B6/B8/B19
WiFi Module	WiFi 2.4GHz (802.11b/g/n), Setting/LAN purpose Station and AP mode
LAN	10/100Mbps
Interface	DC5V Micro-USB power input x1 Nano SIM Card socket x1 LED indicator x4 (Power / LoRa / WiFi / LTE) Config bottom x1 (**Config thru WiFi) Hardware / Factory reset button x1
LoRa Antennas	2dBi, omni
Power Input	5V/2.5A
Dimension	135.6 x 107.1 x 33 mm
Operation Temp.	-20 ~ 65 °C
Storage Temp.	-40 ~ 85°C
Compliance of Certificate	TELEC, VCCI

Dimension:

