

GL6509 Module

Doc ver.: BQW_03_0008.001

Features



- LoRaWAN certified
- Compliance with LoRaWAN 1.0.1, Class A/C
- Industrial grade
- SMT module with castellation edge
- General purpose LoRa module w/ long range data link
- Design for quick integration of sensors to LPWAN
- Optional support a wide frequency range from 470MHz to 928MHz in different SKU *see specification below for more details.
- SDK support for AT command interface, Modbus interface and generic GPIO, UART interfaces
- Advanced report mode available

The GL6509 is designed as general purpose module for sensor integration. Sensor vendors can speed up their LPWAN integration by embedding this module in their product designs. This GL6509 module follows LoRaWAN Protocol Class A/C with comprehensive AT command sets, will take care of the LPWAN communication with standard LoRaWAN gateways as a modem.

The GL6509 module is LoRaWAN certified, no more worries about the interoperability issue. Sensor product can integrate this GL6509 module as a modem and use AT command sets or Modbus interface to send or receive data, through UART interface. Moreover, the sensor product can be controlled by the MCU of the module using patented "Report mode", that automatically reads data from sensor directly without additional components.

Specification

Model Name	WMDS-203
Frequency Band	EU 862~870 MHz / US 902~928 MHz / India 865~867 MHz / AS 923 MHz
Number of Channels	Configurable up to 64 channels / Nodes will select available channel to send data
WAN Protocol	LoRaWAN
Modulation	Based on LoRaWAN
RF Transceiver	SX1276
Transmit RF Power	19 dBm
Receive Sensitivity	Down to -136 dBm
Operation Temperature	-40°C ~ 85°C
Storage Temperature	-40°C ~ 105°C
Power Voltage	3.3 V
Interfaces	UART interface with AT command and Modbus, generic GPIOs and ADCs
Dimensions	L:40 x W:15 x H:2 mm
Weight	3 g
Security	AES 128

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SKU Detail

SKU	Country	Channels	Frequency Band (MHz)
WMDS-203X2TW	Taiwan	16	920~925
WMDS-203X375CN	China	16	920~925
WMDS-203X2M	Malaysia	16	919~923
WMDS-203X343J	Japan	16	920~928
WMDS-203X2EU_LW	Europe	8	EU868 (862~870)
WMDS-203X2A_LW	USA	64	US915 (902~928)

* Samples are also available for India 865~867 MHz.