



## User Manual

**Model : GLSD-PLC-GW-2**

**LPWAN IoT gateway design  
for smart Industrial 4.0 applications**

# User Manual

Model name : GLSD-PLC-GW-2

## Website Introduction

[www.glassdomeinc.com](http://www.glassdomeinc.com)

## Introduction

GLSD-PLC-GW-2 is ARM Cortex-A based hardware platform

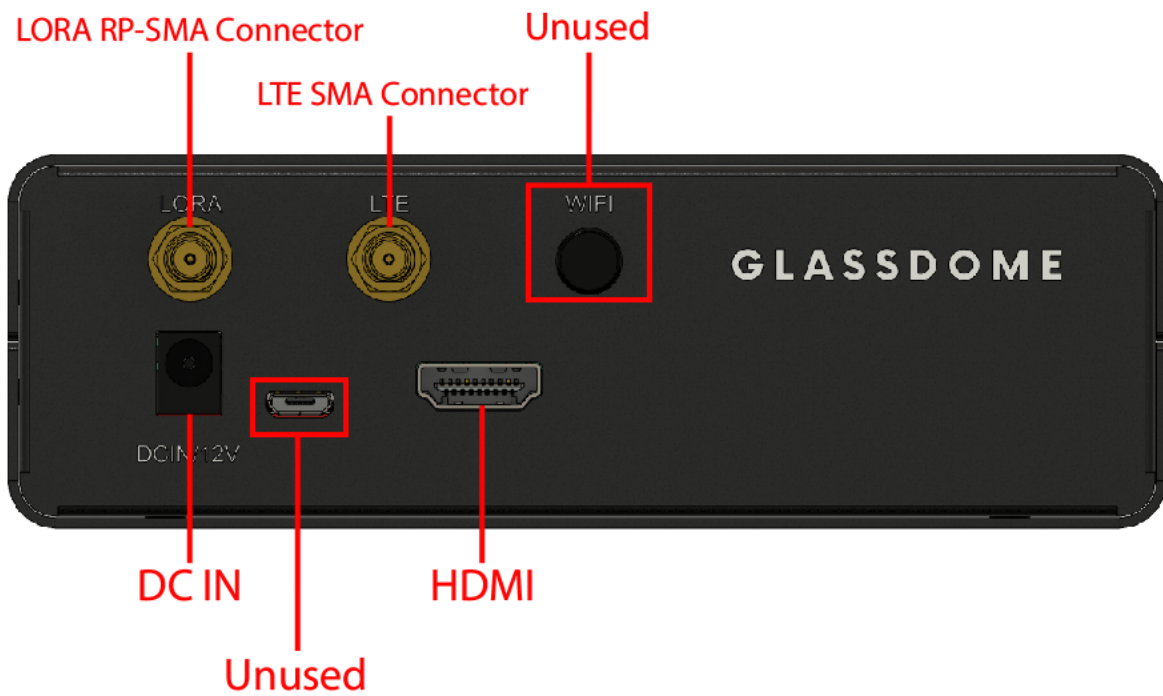
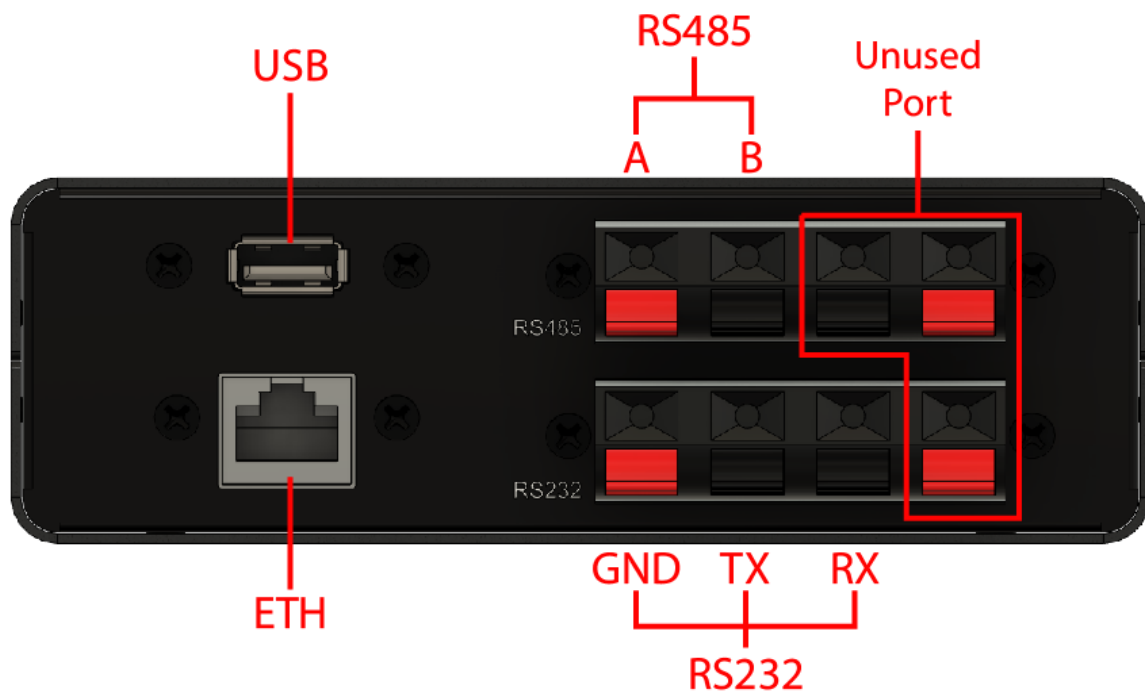
The Glassdome GLSD-PLC-GW-2 Industrial Gateway is LPWAN IoT gateway design for smart Industrial 4.0 applications.

This LPWAN IoT gateway can aggregate both the wireless sensor networks (WSN)

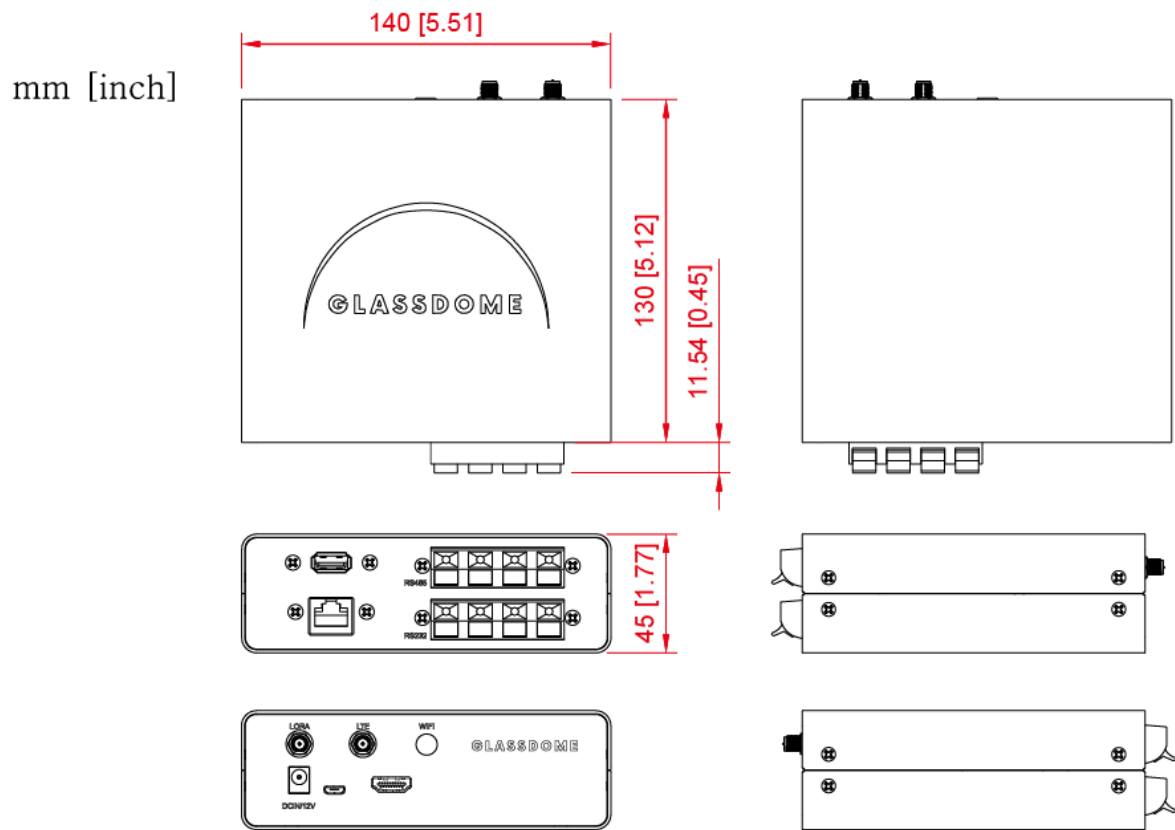
### 1.1 Specification

|                  |                         |                                              |
|------------------|-------------------------|----------------------------------------------|
| Processor System | CPU                     | Quad-Core Cortex-A55 (2.016GHz)              |
| Memory           | DDR                     | DDR4 4GiB with 32-bit bus width              |
| Ethernet         | LAN                     | 1 x 10/100/1000Mbps                          |
| COM(Serial)      | H/W                     | RS-232, RS-485                               |
|                  | ModBus                  | ModBus TCP / RTU Translator                  |
| Connectivity     | LoRa                    | 915MHz                                       |
|                  | Cellular                | 4G LTE-FDD B2 / B4 / B12, WCDMA B2 / B4 / B5 |
| Antenna          | LoRa                    | 902 ~ 928MHz @ 3.5 dBi                       |
|                  | Cellular                | 824 ~ 2200MHz @ 3.5 dBi                      |
| Dimensions       | W x L x T               | 140mm x 139mm x 45mm                         |
| Power            | DC-In                   | 12V DC-In                                    |
| Environment      | Operational Temperature | -20 ~ 70 °C                                  |
| Certifications   | Level                   | FCC / Class A                                |

## 1.2 Hardware Views



### 1.3 Dimensions



### 1.4 Safety Instructions

- 1) Keep this equipment away from humidity
- 2) Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage
- 3) Liquid has penetrated into the equipment
- 4) The equipment has been exposed to moisture
- 5) The equipment has been dropped and damaged.

# Declaration of Conformity

## FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment 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 interference will 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

## FCC Part 15.19

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.

## FCC Part 15.21

Any changes or modifications (including the antennas) to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

**FCC and IC RF Radiation Exposure Statement:** This equipment complies with FCC and IC RF Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

# Declaration of Conformity

ISED

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF du FCC et IC d'exposition aux radiations: Cet équipement est conforme à l'exposition de FCC et IC rayonnements RF limites établies pour un environnement non contrôlé. L'antenne pour ce transmetteur ne doit pas être même endroit avec d'autres émetteur sauf conformément à FCC et IC procédures de produits Multi-émetteur. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.