



DGW-521

RS-232/RS-485/USB to DALI Gateway

Features

- Conversion between RS-485/RS-232/USB and DALI Interfaces
- Simplified Wiring Process
- Built-in DALI Power can be enabled or disabled using a Switch
- ±4 kV EFT Protection and ±2 kV Surge Protection for the Power Line
- ±4 ESD Protection for the RS-232/485/USB Data Line
- 1500 VDC Isolation



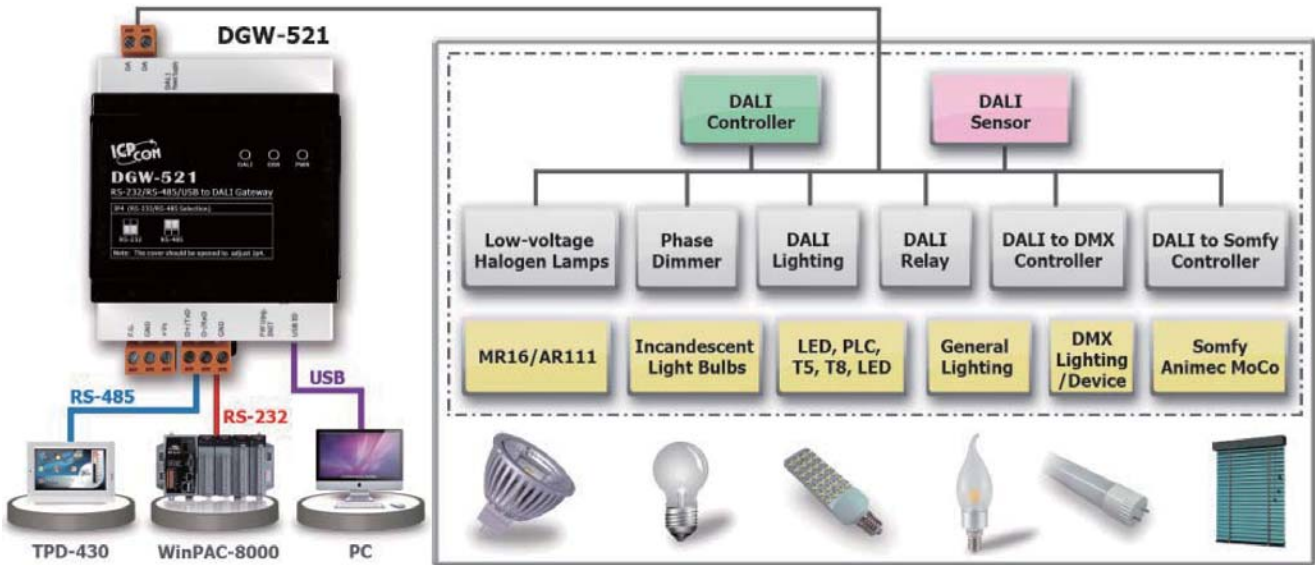
Introduction

The DGW-521 is a communication gateway between the Modbus RTU/DCON and the DALI (Digital Addressable Lighting Interface) protocols, and allows a Host PC, PAC, or TouchPAD to access DALI devices by providing three interfaces that enable conversion from RS-232/RS-485/USB to DALI. The module provides a built-in DALI power supply that can be enabled or disabled via a switch. DALI is an international standard for lighting control interfaces, and is suitable for DALI lighting systems covering small areas. The maximum length of the DALI signal cables cannot exceed 300 m.

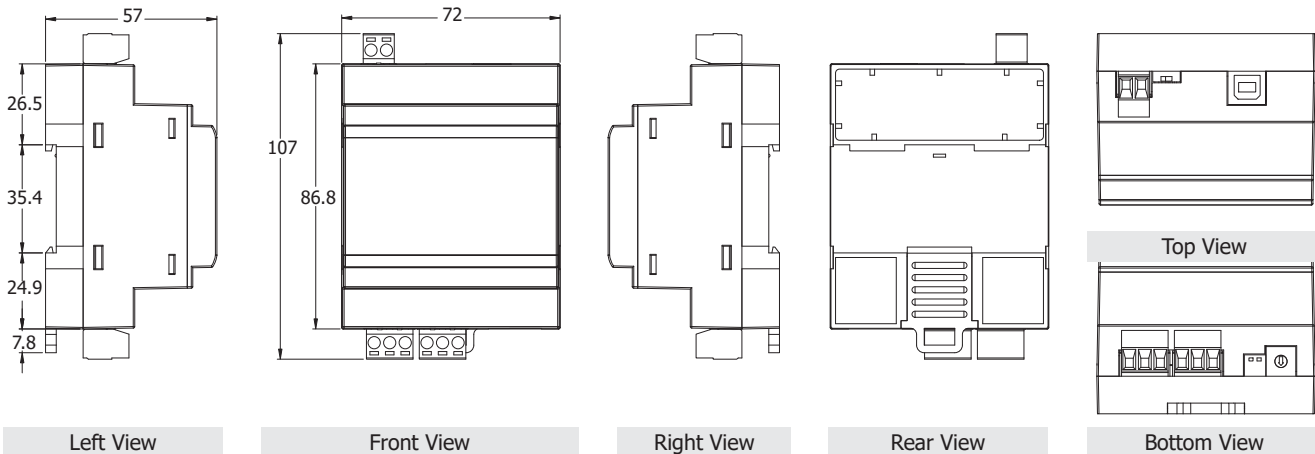
System Specifications

| Interface | | |
|------------------------|---|---|
| DALI | Connector | 2-pin Terminal Block |
| | Baud Rate (bps) | 1200 |
| | Isolation | 1500 VDC |
| | Built-in DALI power | 16 VDC ±5%, Max. Current 250 mA (Enabled/Disabled via a switch) |
| UART | COM Port | RS-485/RS-232 |
| | Connector | 3-pin Terminal Block (D+, D-, GND/TxD, RxD, GND), Jumper Selectable |
| | Transmission Distance (m) | Depends on Baud Rate |
| | Baud Rate (bps) | 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 |
| USB | Protocol | DCON, Modbus RTU |
| | Connector | USB Type B |
| | Transmission Speed | 12 M bps |
| | Specification | USB 1.1 and USB 2.0 standard compatible |
| | OS Support | Windows XP (32/64-bit), Windows 7 (32/64-bit) |
| | Protocol | DCON and Modbus RTU via Virtual COM port |
| LED Indicators | | |
| System LED Indicators | PWR/RUN/ERR LED | |
| EMS Protection | | |
| ESD (IEC 61000-4-2) | ±4 kV Contact for Each Terminal, ±8 kV Air for Random Point | |
| EFT (IEC 61000-4-4) | ±4 kV for Power Line | |
| Surge (IEC 61000-4-5) | ±2 kV for Power Line | |
| Power | | |
| Power Supply | Unregulated +10 VDC ~ +30 VDC | |
| Connector | 3-pin Terminal Block | |
| Protection | Power Reverse Polarity Protection, Overvoltage Brown-out Protection | |
| Power Consumption | 6 W | |
| Mechanical | | |
| Casing | Plastic | |
| Dimensions (L x W x H) | 107 mm x 72 mm x 57 mm | |
| Installation | DIN-Rail Mounting | |
| Environment | | |
| Operating Temperature | -25°C ~ +75°C | |
| Storage Temperature | -30°C ~ +80°C | |
| Humidity | 10 ~ 90% RH, Non-condensing | |

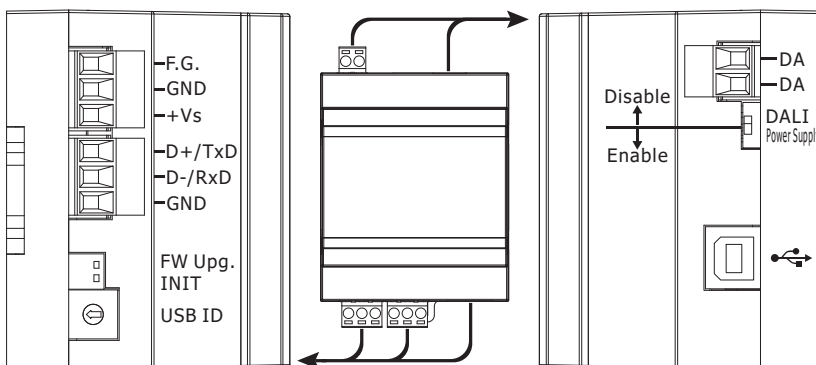
Applications



Dimensions (Units: mm)



Pin Assignments



Ordering Information

| | |
|-------------------|---|
| DGW-521 CR | RS-232/RS-485/USB to DALIGateway (RoHS) |
|-------------------|---|

Accessories

| | |
|---------------------|--|
| GPSU06U-6 CR | 24 VDC /0.25 A, 6 W Power Supply |
| DIN-KA52F CR | 24 VDC /1.04 A, 25 W Power Supply with DIN-Rail Mounting |