DGW-521

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

Features

- Conversion between RS-485/RS-232/USB and DALI Interfaces
- Simplifi ed 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

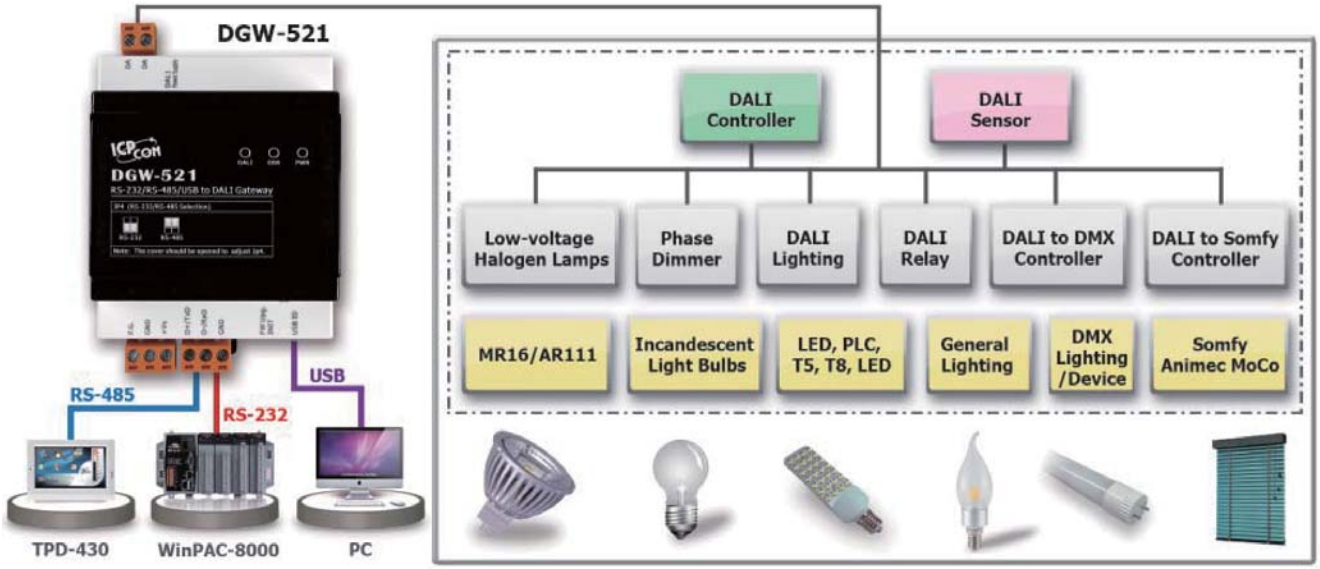
Introduction

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.

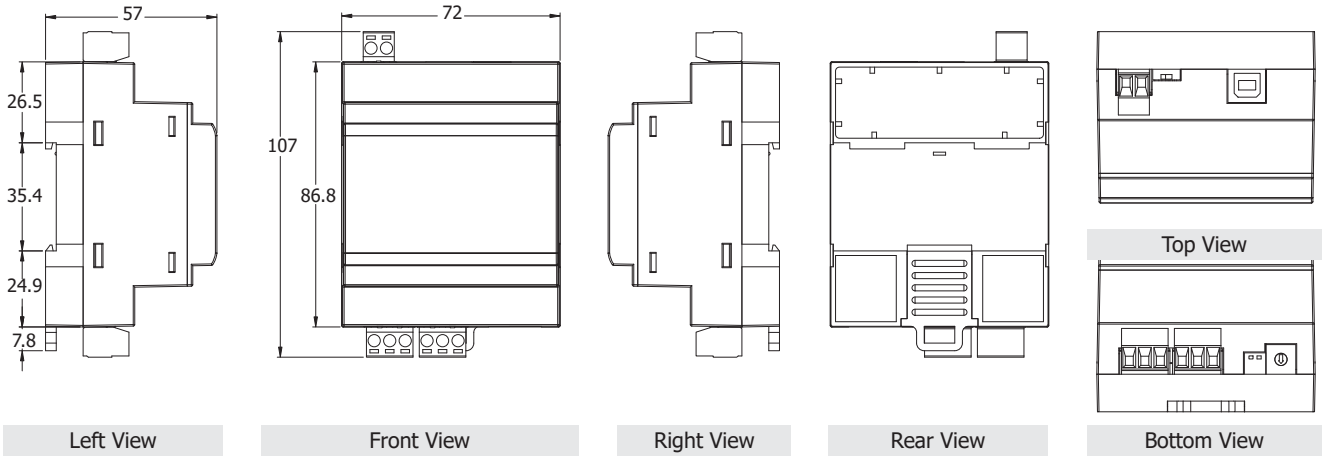
System Specifications

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)
	Version	DALI version-1
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
	Protocol	DCON, Modbus RTU
USB	Connector	USB Type B
	Transmission Speed	12 M bps
	Specifi cation	USB 1.1 and USB 2.0 standard compatible
	OS Suppor	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

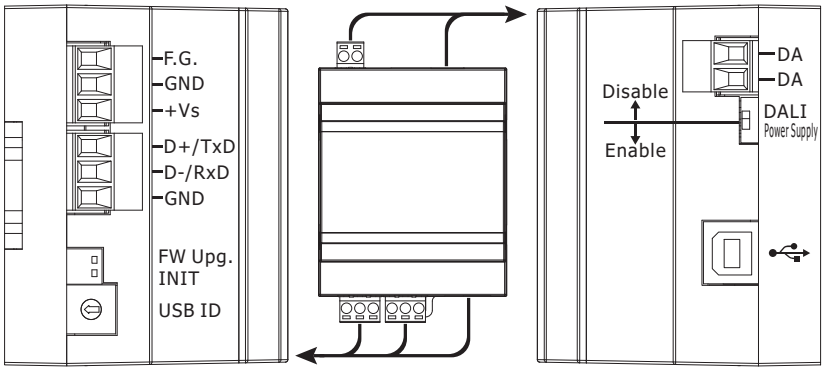


Dimensions (Units: mm)



Left View | Front View | Right View | Rear View | Bottom View

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