

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

DGW-521 **NEW**

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 V_{DC} Isolation
- DIN-Rail Mounting
- Wide Operating Temperature Range: -25 °C ~ +75 °C

Introduction

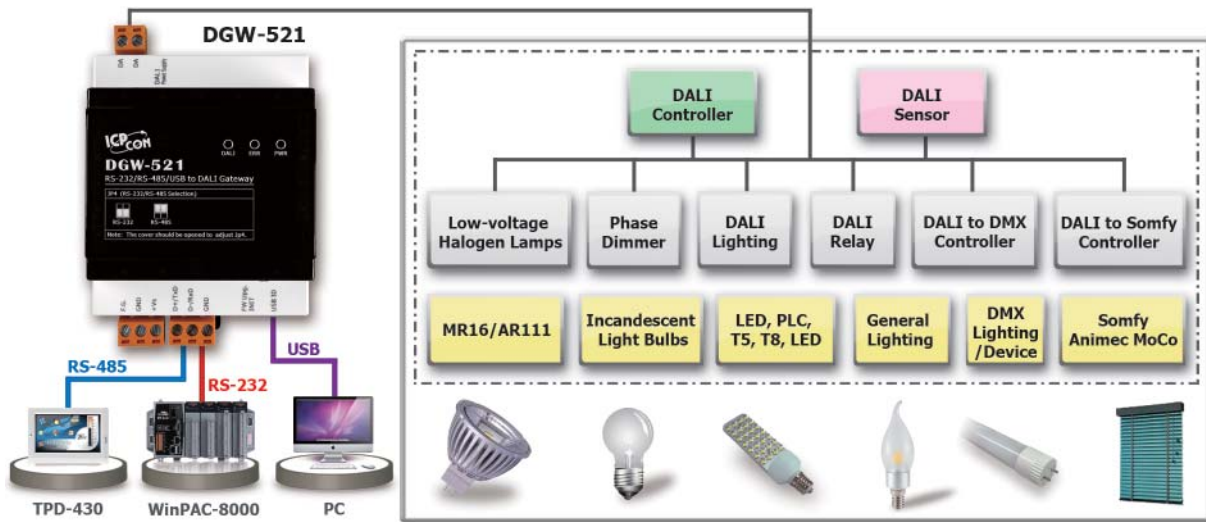
The DGW-521 is a communication gateway between the Modbus RTU/DCON and the DALI (Digital Addressable Lighting Interface) protocols, and allows a Host PC, PAC, or TouchPAD to access DALI devices by providing three interfaces that enable conversion from RS-232/RS-485/USB to DALI. The module provides a 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

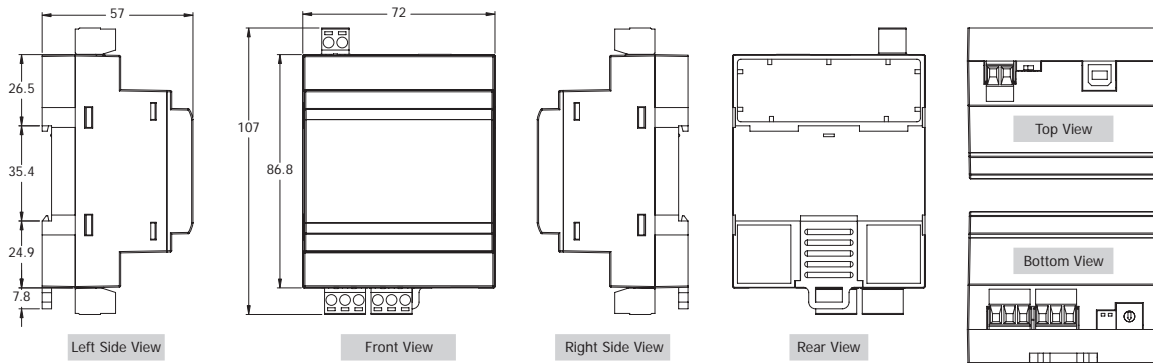
Model		DGW-521
Interface		
DALI	Connector	2-pin Terminal Block
	Baud Rate (bps)	1200
	Isolation	1500 V _{DC}
	Built-in DALI power	16 V _{DC} $\pm 5\%$, Max. Current 250 mA (Enabled/Disabled via a switch)
UART	COM Port	RS-485/RS-232
	Connector	3-pin Terminal Block (D+, D-, GND/TxD, RxD, GND), Jumper Selectable
	Transmission Distance (m)	Depends on Baud Rate
	Baud Rate (bps)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
	Protocol	DCON, Modbus RTU
USB	Connector	USB Type B
	Transmission Speed	12M 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 V _{DC} ~ +30 V _{DC}	
Connector	3-pin Terminal Block	
Protection	Power Reverse Polarity Protection, Overvoltage Brown-out Protection	
Power Consumption	6 W	

Model	DGW-521
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

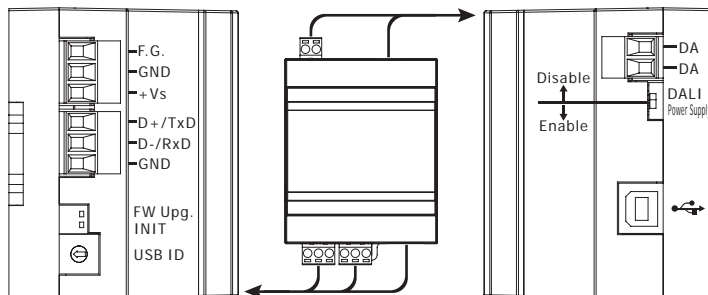
Applications



Dimensions (Units: mm)



Pin Assignments



Ordering Information

DGW-521 CR	RS-232/RS-485/USB to DALI Gateway (RoHS)
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Accessories

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