

## 1/2 Multi-Channel DALI Gateway Controller AX/G-DDW1.0 /2.1

### Functional Description

- Sequence Control: 5 sequences, each supporting up to 16 steps
- Online editing of DALI addresses/groups/scenes
- Batch provisioning and storage of DALI device parameters
- Supports individual, group, scene, and broadcast control for Channel 1/2 drivers, enabling on/off, brightness, and color temperature operations.
- Autonomous reporting of DALI bus driver faults
- LAN-based PC configuration and control (Includes all above functions)

### Characteristics

- KNX-DALI 1/2 Channel Gateway
- Programmable via ETS5/ETS6 Software
- Manual Control via Buttons
- 3-Year Warranty

### ● Overview

DALI Gateway Controller is a high-performance, intelligent core device for lighting control systems, specifically designed for efficient lighting management in modern buildings. Integrating data relaying, protocol conversion, and system integration, it supports IEC 62386 standards and DALI-2 protocol, enabling seamless integration with building automation systems like KNX for cross-platform coordinated control. Multi-channel DALI Control: Independent DALI control channels supporting intelligent strategies for light dimming and scene configuration. Compact DIN-Rail Mounting: Space-optimized for distribution boxes, Tool-Free Installation: Simplified wiring with screw-type terminals ensuring secure connections, KNX Bus-Powered: Reduced cabling costs via KNX bus power supply. Widely applicable to various buildings including office buildings, hotels, shopping malls, hospitals, schools, and factories, facilitating the creation of energy-efficient, comfortable, and intelligent lighting environments.

## 1. Parameters

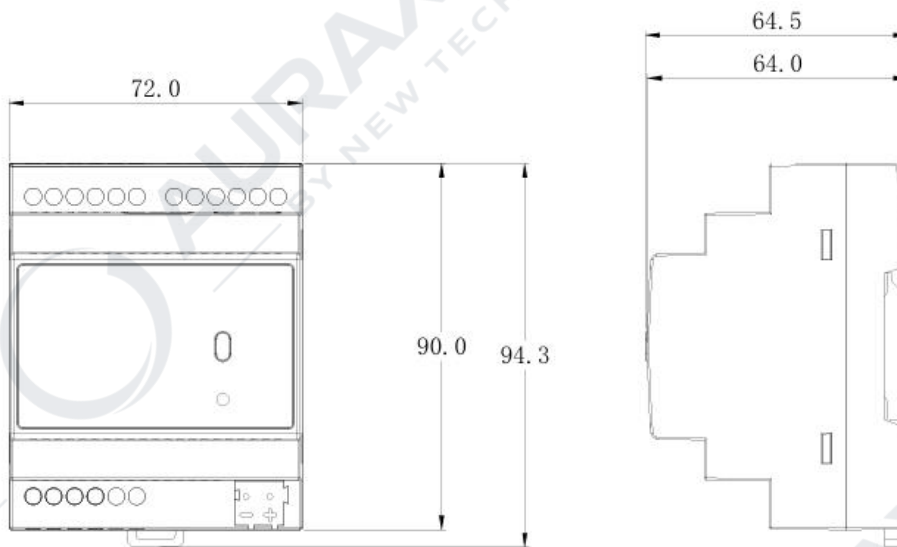
Model		AX/G-DDW1.1	AX/G-DDW2.1
Basic Parameters	KNX Bus Voltage	30VDC	
	KNX Bus Current	<15mA	<17mA
	Bus Power Consumption	<450mW	<510mW
	Auxiliary Power Supply Input Voltage	230VAC	
	Auxiliary Power Supply Input Current	<93mA	
	Auxiliary Power Supply Power Consumption	<9.44W	
	Number of channels	1	2
	output type	DALI control signal	
Output Performance Characteristics	DALI Bus Voltage	Built-in DALI Power Supply; Voltage range: 18V±0.5VDC	
	Certified Minimum Current	125mA	250mA
	Certified Maximum Supply Current	250mA	500mA
	Rate Power	4.5W	9W
Operation and Display	Programming Button	Setting Physical Addresses	
	Manual Button/ LED Indicator	Manual Control and Indication	
	LED (Status)	Solid Red: Entered ETS Download Mode Flashing Red: Bus Fault Flashing Amber: DALI Bus Activity Detected Solid Amber: Broadcast Switch State - ON Solid Green: Broadcast Switch State - OFF and DALI Bus Normal	
	Test/Set buttons	Press (<5S) : broadcast ON/OFF Press and hold (>5S) : Commissioning Unaddressed Devices Press and hold (>10S) : Full System Readdressing Action Triggers Upon Release of Long-press	
Environment	Ta/Operation Temp	-5 ~ +45°C	
	Ts/Storage Temp	-20 ~ +60°C	
	Operating Humi	10 ~ 95% RH Condensation-Free	
Connection	Screw-Type Terminal	0.5 – 4.0mm <sup>2</sup> Solid Wire, 0.5 - 2.5mm <sup>2</sup> Stranded Wire	
	KNX Bus Terminal	0.8mm φ, Solid Wire	
	Dimension	72*94.5*64.5mm (W*H*D)	72*94.5*64.5mm (W*H*D)
	Face Width	4SU	4SU
	Install	35mmDIN Rail Mounting	

## 2. Maximum Load Capacity per Gateway Model

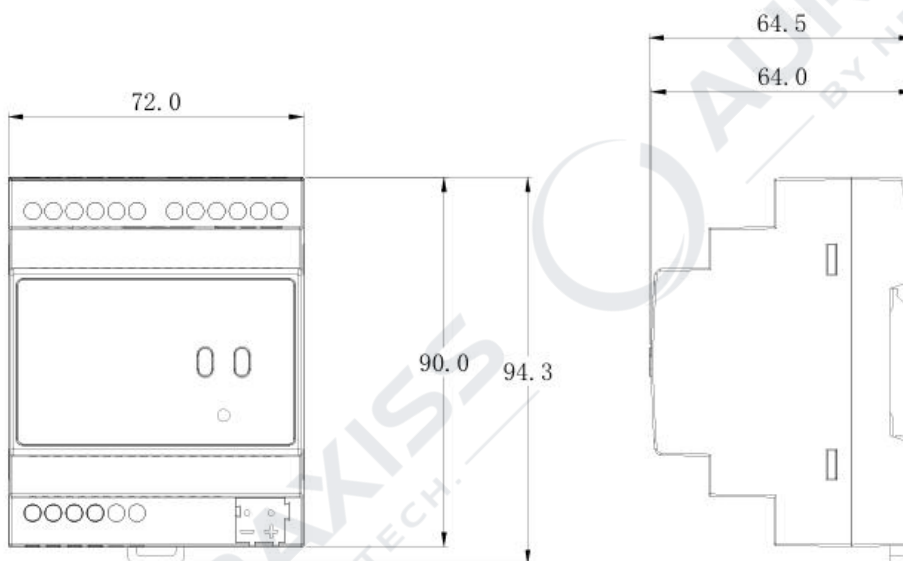
Load type	AX/G-DDW1.1	AX/G-DDW2.1
Maximum number of devices that can be connected ( pcs )	64	128

## 3. Dimension

AX/G-DDW1.1

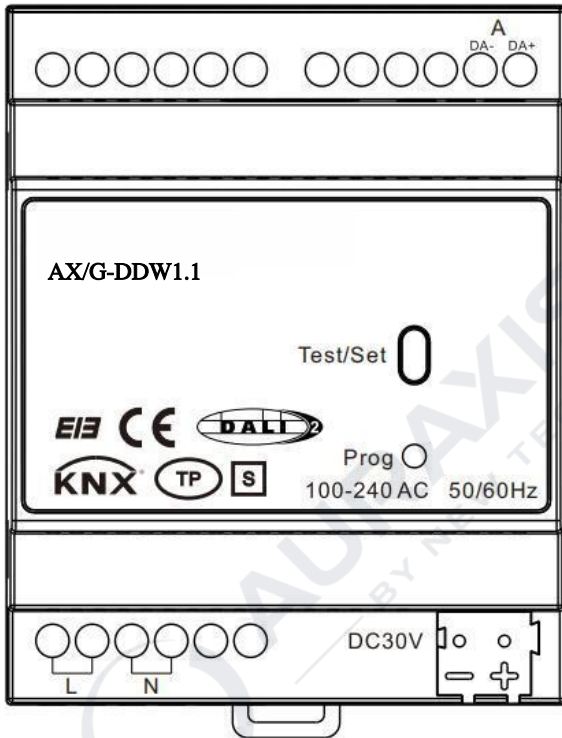


AX/G-DDW2.1

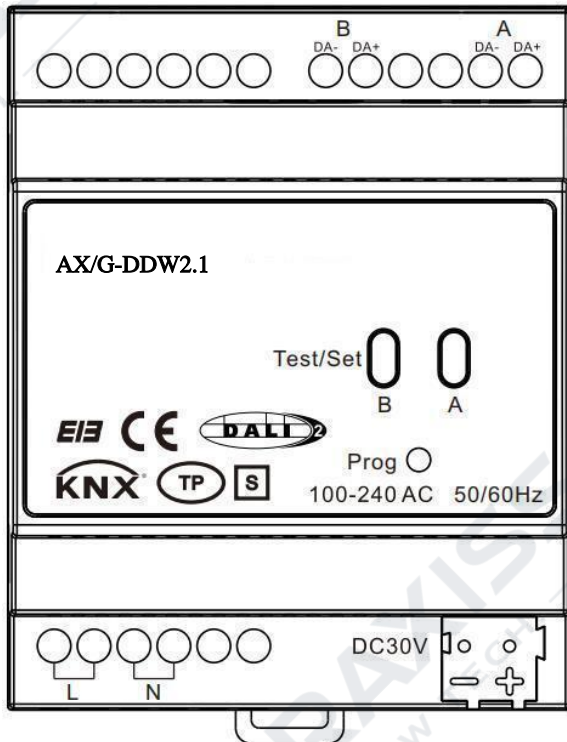


#### 4. Label

AX/G-DDW1.1

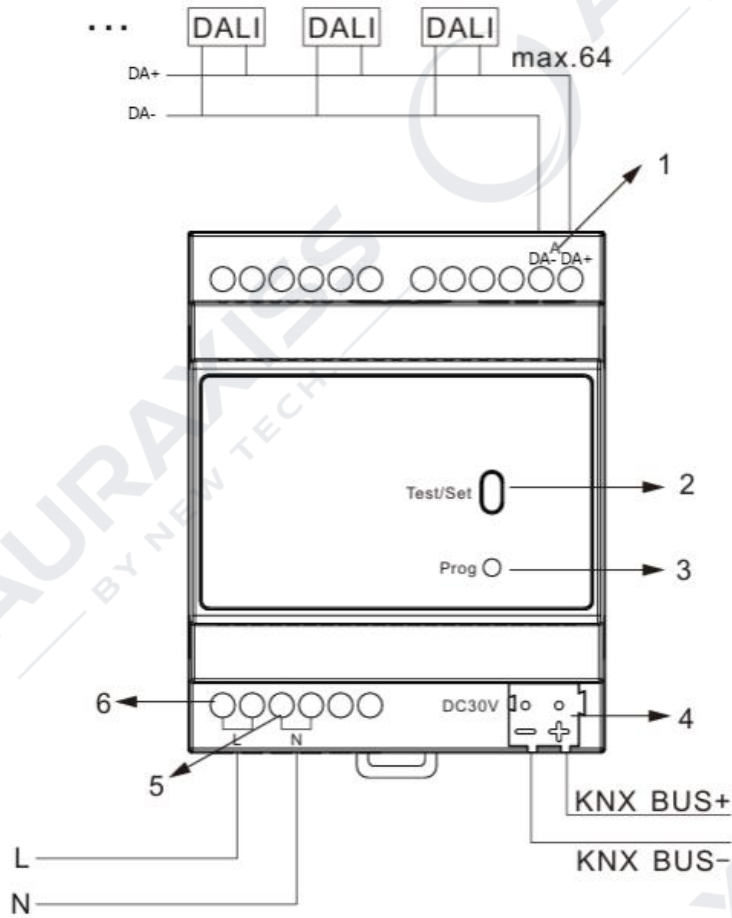


AX/G-DDW2.1



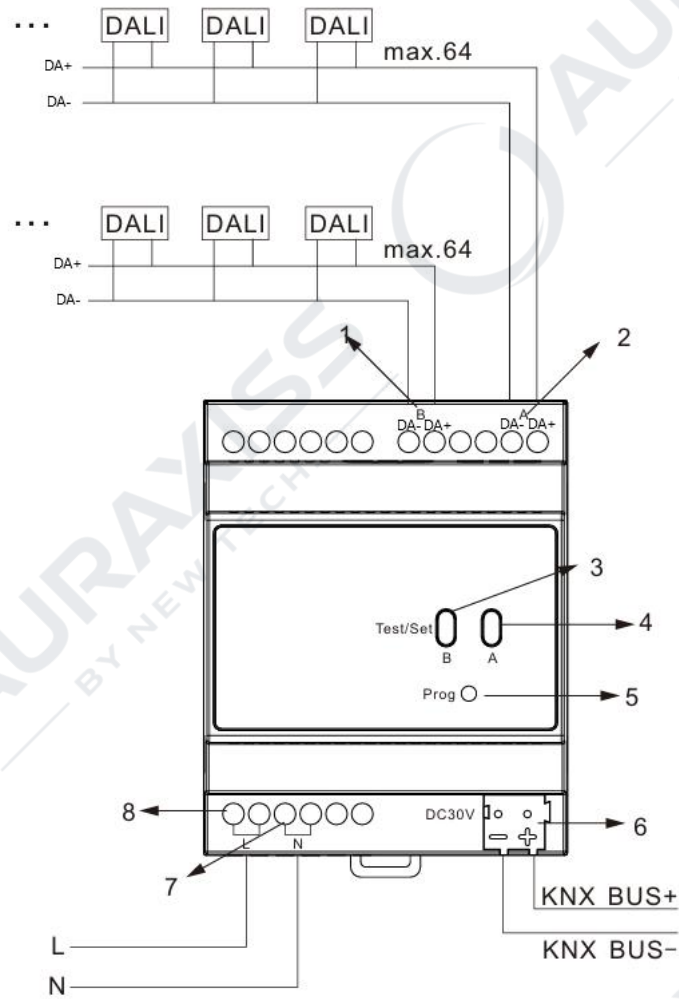
## 5. Wiring Diagram

AX/G-DDW1.1



- 1、 DALI Bus Terminals
- 2、 Manual Override Switch
- 3、 PROG Button
- 4、 KNX/EIB Bus Terminals
- 5、 Neutral Terminal (N)
- 6、 Live Terminal (L)

AX/G-DDW2.1



- 1、 DALI-B Bus Terminals
- 2、 DALI-A Bus Terminals
- 3、 Channel B Override Switch
- 4、 Channel A Override Switch
- 5、 PROG Button
- 6、 KNX/EIB Bus Terminals
- 7、 Neutral Terminal (N)
- 8、 Live Terminal (L)

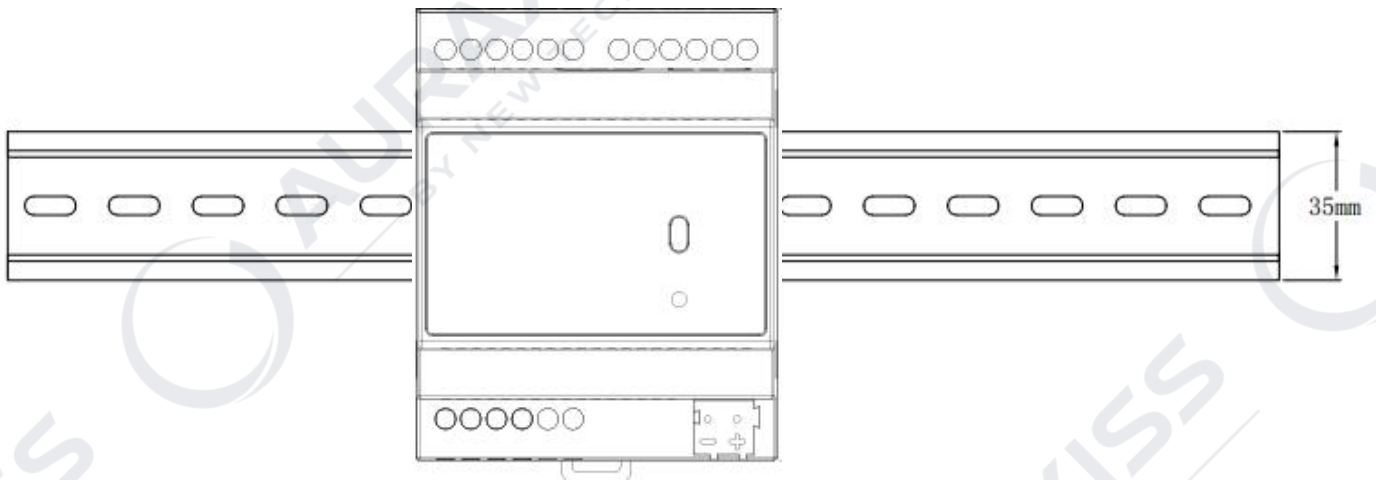
## 6. Mounting Drawing

Step 1. Secure the DIN rail

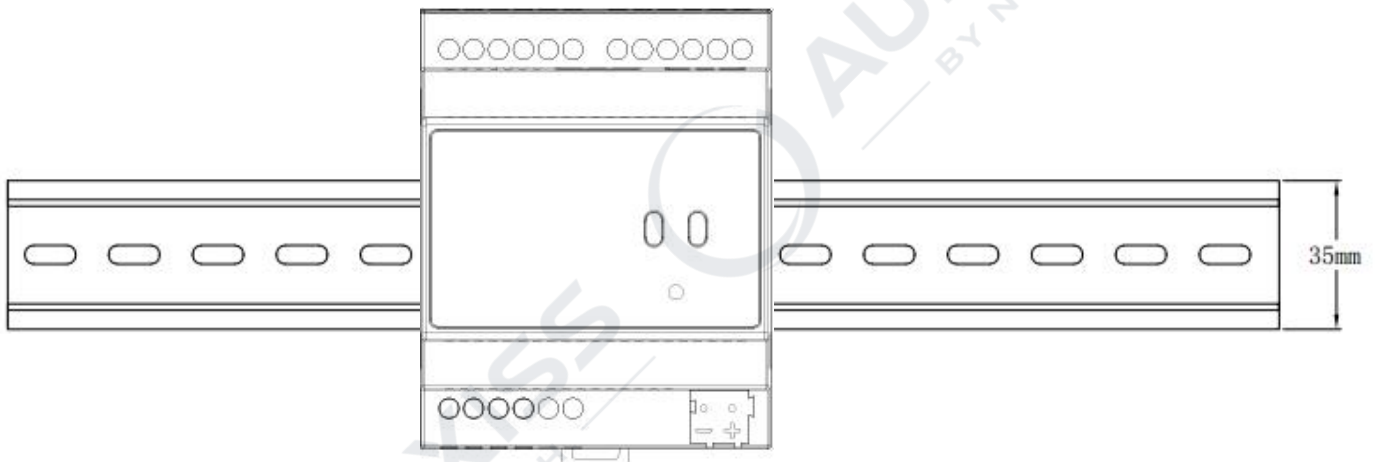


Step 2. Press the entire module onto the rail and slide it to the desired position until it locks in place.

AX/G-DDW1.1



AX/G-DDW2.1



## 7. Revision History

DATE	REV	Modification details
2025-10-14	V1.0	Initial Release