



WRKT22245NC WRKT22255NC

KNX DALI GATEWAY DL101 (1 Channel) KNX DALI GATEWAY DL102 (2 Channels)

WRKT22245NC WRKT22255NC

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Installation should only be carried out by a technical personnel having certificate of competency



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611055-KNX-EN

General Information

The KNX DALI Gateway product is an interface device that works on lighting control between the KNX bus and the DALI bus in accordance with the DALI-IEC 62386 (DALI-1 / DALI-2) standard. The device allows KNX to manage and monitor ballasts in the DALI bus as individual, group and broadcast. The device has options with 1 or 2 channel DALI outputs and provides energy to the DALI bus with the internal DALI power supply. Therefore, it is not allowed to connect an external DALI power supply to the DALI line. User and manager level operations can be performed and various warnings and device information can be accessed with the button, LED and segment interface on the device. The device has 2 isolated relay outputs and these outputs can be used in various applications. The device also has an Ethernet port and can be mounted on a DIN rail.

Main Features

- For each DALI channel, 64 ballasts, 16 groups, 16 scenarios and broadcast control
- · For each DALI ballast and group, staircase, night, panic and burn-in mode control over KNX
- Faults monitoring of DALI ballasts via KNX
- Automatic addressing of ballasts in DALI bus
- Manual control and monitoring of ballasts on
- the DALI bus via the user interface
- Feature of DALI power supply
- Software update over Ethernet

Product	Components
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12	A DALI bus faults A MENU - 3
	B P65: Catewoy F65: Coverbad F67: Overbidge F68: Short Kircul
10 ←	100: Decker replace □ □ □ 5 Image: Set in the
	KNX WRKT2225 DALI GATEWAY DL102
	805778-P P 3 μ.2λ.230V- Made in Turkey 7
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	9 8

- 1- DALI Channels (There is no B channel in the
- single channel option.)
- 2- Relay Outputs*
- 3- Menu Active LED
- 4- Status LED

- 5- IP Connection Status LED
- 6- KNX programming button and LED
- 7- KNX bus terminal
- 8- Ethernet connector
- 9- Power Supply 230V AC, 50Hz
- 10 Manual operation buttons
- 11- DALI Bus faults description

12-7 segment display and channels LED (Channel's LED turn on, when channel is selected)

* Relay outputs are for signaling purposes. To use with the load, a contactor must be used.

Product Versions

Product Features	WRKT22245NC	WRKT22255NC
Number of DALI Channel	1	2
Relay Outputs	2	2

Technical Information						
SUPPLY VOLTAGE						
Voltage range	230 V AC, 50/60 Hz					
Power consumption	Max. 8W (at 230 V AC and max. load) (for 1 ch.)					
total via mains	Max. 12W (at 230 V AC and max. load) (for 1 cf.)					
DALI						
Number of outputs	1 channel	2 channel				
Number of DALI devices	Maximum 64 ba	llast per output				
Protection	Short circuit, Overload, Over-voltage (230VAC)					
DALI voltage						
No-load voltage	18 V DC	18 V DC				
Maximum supply current Guaranteed supply current	250 mA 230 mA	2x250 mA 2x190 mA				
	The DALI control voltage	ge is a functional				
	extra-low voltage (FEL)	/).				
	- 2.5 mm ² max. 300 m					
DALI cable lengths	- 1.5 mm ² max. 300 m - 1.0 mm ² max. 224 m					
(for copper wire)	- 0.75 mm² max. 168 m					
	- 0.5 mm² max. 112 m					
DALI transmission rate	1200 bit / s					
KNX						
KNX voltage	DC 21 32 V SELV					
KNX current consumption	<5 mA					
KNX interface	TP1					
Configuration mode	S-Mode					
IP	1					
Connections Speed	10/100 Mbits					
RELAY OUTPUT						
Output Contact 1	1 N/O, 2A-230V AC Res	istive, 2A 30V DC				
Output Contact 2	1 N/O, 2A-230V AC Res	istive, 2A 30V DC				
BUTTONS AND DISPLAY						
BUTTONS AND DISPLAY Control buttons	<, SET, >, ESC (
	MENU, STATUS 1/2, IP PROG., A, B (only 2 cl	Total 4 button) P LINK/TRAFFIC, KNX hannels) - Total 6 LED				
Control buttons Display and LED elements	MENU, STATUS 1/2, IP PROG., A, B (only 2 ch indicators 3 Digit 7-Se	Total 4 button) P LINK/TRAFFIC, KNX hannels) - Total 6 LED				
Control buttons Display and LED elements ENVIRONMENTAL COND	MENU, STATUS 1/2, IP PROG., A, B (only 2 cl indicators 3 Digit 7-Se ITIONS	Total 4 button) P LINK/TRAFFIC, KNX hannels) - Total 6 LED				
Control buttons Display and LED elements ENVIRONMENTAL COND Protection degree (IEC60529)	MENU, STATUS 1/2, IP PROG., A, B (only 2 ch indicators 3 Digit 7-Se	Total 4 button) P LINK/TRAFFIC, KNX hannels) - Total 6 LED				
Control buttons Display and LED elements ENVIRONMENTAL COND Protection degree	MENU, STATUS 1/2, IP PROG., A, B (only 2 cl indicators 3 Digit 7-Se ITIONS IP20	Total 4 button) LINK/TAFFIC, KNX hannels) - Total 6 LED gment LED Display				
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Control buttons Display and LED elements ENVIRONMENTAL COND Protection degree (IEC60529) Protection class (IEC61140) Isolation category	MENU, STATUS 1/2, IP PROG., A, B (only 2 d indicators 3 Digit 7-See TIONS IP20 II Overvoltage category Pollution degree Operation -5+45 Storage - 10+55	Total 4 button) LINK/TRAFFIC, KNX hannels)- Total 6 LED gment LED Display III (IEC60664) 2 (IEC60664) °C °C °C				
Control buttons Display and LED elements ENVIRONMENTAL COND Protection degree (IEC60529) Protection class (IEC61140) Isolation category Temperature range	MENU, STATUS 1/2, IP PROG., A, B (only 2 cl indicators 3 Digit 7-See TIONS IP20 II Overvoltage category Pollution degree Operation -5+45 Storage - 10+55 Transport -25+70	Total 4 button) LINK/TRAFFIC, KNX hannels)- Total 6 LED gment LED Display III (IEC60664) 2 (IEC60664) °C °C °C				
Control buttons Display and LED elements ENVIRONMENTAL COND Protection degree (IEC60529) Protection class (IEC61140) Isolation category Temperature range Humidity	MENU, STATUS 1/2, IP PROG., A, B (only 2 cl indicators 3 Digit 7-See TIONS IP20 II Overvoltage category Pollution degree Operation -5+45 Storage - 10+55 Transport -25+70	Total 4 button) LINK/TRAFFIC, KNX hannels)- Total 6 LED gment LED Display III (IEC60664) 2 (IEC60664) *C *C *C *C				
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IP Settings

KNX DALI Gateway is designed for use in IEEE802.3 compatible 10/100 BaseT networks. Device receives IP address from DHCP server if "IP address assignment" is selected as "DHCP" in ETS database. If DHCP is not activated, the device starts with the fix IP address entered on the ETS project.

Default IP settings are shown in the following table.

DHCP	Off	
Fix IP Address	192.168.1.154	
Net Mask	255.255.255.0	
Gateway Address	192.168.1.1	
Default Usernames	user	admin
Default Passwords	1234	9876

Firmware Update

The firmware of the KNX DALI Gateway device can be updated through a web browser without any extra device required. The firmware update doesn't affect KNX (ETS) and DALI saved data. But if you desire to reset the saved data, you can do that in the firmware updated process. To update the firmware;

1. Type IP address of DALI Gateway into the search bar of any web browser (recommend Google Chrome). (Please see table 2 for default value)

2. Login page will be loaded.

3. Enter your username and password. (Please see table 2 for default value)

4. Locate the Firmware Update page.

5. Click on the "Choose File" button in the window that opens, and the firmware file with the "*.bin" extension provided by Panasonic Life Solutions is selected from the location where it is saved.

6. Press "UPLOAD" button.

7. When the uploading is started, "UPLOAD STARTED" will be appeared on the web page and "FUP" animation is shown on the display of the device.

8. Please wait until the uploading is completed. 9. When the uploading is completed successfully, "UPLOAD SUCCEED. NEW FW VER: XX.XX.XX PLEASE REBOOT!" is appeared on the web page and "FUP" animation is stopped. If not success, "UPLOAD FAILED!! TRY AGAIN" is shown. Please try to perform the above steps again.

10. At this stage, if you desire to reset KNX or DALI saved data (factory defaults), you should press "RESET KNX" or "RESET DALI" button and wait until "Reset SUCCESS. PLEASE REBOOT!" is appeared on the web page.

11. Press "REBOOT" button.

12. When the reboot is started, a web page will be loaded to wait boot process.

13. Please wait until boot process is done and the login web page is loaded.

14. At the boot process, "KNX PROGRAM" LED is blink fast (about 200 milliseconds).

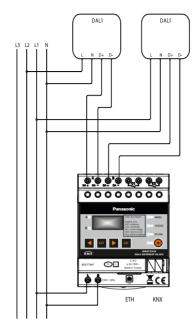
15. When the boot process is complete

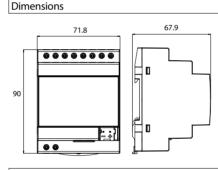
- successfully, "STATUS" LED is blink normal (about 1 second) and the device starts up.
- 16. For more information, please see the

technical document.

Example Connection

DALI control can be provided at the same time with two independent channels. DALI ballasts or an external source can be switched with the help of relays on the device. Connection between the computer and the device can be made directly as a pair-to-pair via Ethernet and configuration can be made without the need for router.





Device Behavior

Factory Default

In the delivered state, the ETS application is unloaded, the manual control is enabled and only DALI broadcast control is available until DALI commission. DALI commission can be done limited way in manual control for first test of DALI bus.

The device can be delivered with old firmware version. Please check our website for latest firmware and updating steps.

ETS Programming

User can define the device behavior and connect it to another KNX devices after programming it by ETS. The behavior of the device after programming with the ETS depends on the configuration. The description of the features, parameters and objects is in the device reference manual.

Manual Control

Manual control is available at the factory default. It can be disabled via ETS parameters, if desired. Via manual control, ECG's where at DALI bus can be checked for electrical connection, gear functionality, status of lamp and etc. To enter the manual control mode, press [SET] button for 5 seconds. MENU LED will be turned on and SEGMENTS will indicate user menu information. For user menu states, please check related documents.

WARNING

• Ensure that the power is cut off before the assembly of the products.

• Connection and assembly of the electrical devices should be carried out only by the technical personnel having certificate of competency.

 No responsibility is assumed for the entire of the malfunction, accident and loss arising from the assembly or interference of the persons not having the competency certificate.

• Use dry or slightly damp cloth to clean the buttons, cover and frame of the product. Never use alcohol, cologne, detergent or other similar chemicals for cleaning. Do not perform wet cleaning do not contact the product with water when the product is energized. • In case the surface to which the product is connected is dyed, store the product by removing its cover and the frames.

Keep the product away from the damp or wet environment during the transportation and shipping.
It is intended for indoor use only.

Service and Guarantee

• Warranty period starts as of the delivery date of the product and it is 2 years.

• Warranty covers the malfunctions likely to occur due to the manufacturing defects of the product and within the warranty period.

• The product including all of its parts is under waranty as a whole. If the product turns out to be defective, the consumer can use one of the following rights stipulated in Article 11 of Consumer Protection Law no. 6502;

- a- Withdrawal from the contract
- b- Demanding discount from sales fee
- c- Demanding free repair,

d- Demanding the replacement of the sold one with a fungible one free from defects. In case the consumer chooses the right of free repair among those rights; the dealer is obliged to repair the product or have the product repaired without claiming any fee under the name of replaced part fee, labor cost or for any other reasons. The consumer can also use the right of free repair against the manufacturer or exporter. The dealer, manufacturer and exporter are jointly and severally liable for the usage of this right by the consumer. In case the consumer uses the right of free repair and if the product

- Fails within the warranty period again and
- The maximum period required for the repair is
- exceeded and

- Authorized service station, dealer, manufacturer or exporter state that it's not possible to repair the product in a report, the consumer can demand the return of the product fee, fee discount at the ratio of the defect or the replacement with the one free of defects, if possible, from the dealer. The dealer can not reject the demand of the consumer. In case this demand is not met, the dealer, manufacturer and exporter shall jointly and severally be held responsible.

• The repair period of the product can not exceed 20 business days. This period starts on the notification of the failure on the product to the authorized service station or the dealer within the warranty period and from the date of delivery of the product to the authorized service station out of warranty period. In case of not eliminating the product malfunction within 10 business days, manufacturer or importer is obliged to dedicate another product with similar characteristics to the use of the consumer until the completion of the product repair. In case the product fails within the warranty period, elapsed time is added to the warranty period.

• Usage of the product contrary to the rules stipulated in user's manual, operating out of determined voltage, current and environmental conditions, damage on the cable connection due to the user's fault and failure of the product due to the facts arising from the fire, flood, earthquake, lightning and similar disasters are not under warranty.

 The consumer can apply to the arbitration committee for consumers or the consumer court where the consumer operations are made or in the residential area for the disputes to be occurred regarding the usage of the rights arising from the warranty.

 In case the dealer doesn't provide this certificate of warranty, the consumer can apply to the General Directorate of Consumer Protection and Market Surveillance of Ministry of Customs and Trade".