

— **DALI Gateways DG/S1.64.1.1 & DG/S 2.64.1.1** **New features and product selection table**

GPG BUILDING AUTOMATION

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Despite checking that the contents of this document are consistent with the current versions of the related hard and software of the products mentioned within, deviations cannot be completely excluded. We therefore assume no liability for correctness. Necessary corrections will be introduced as and when new versions of the document are generated.

Introduction

The ABB i-bus® KNX DALI Gateways Basic DG/S x.64.1.1 are KNX MDRC in Pro M design devices for installation in the distributor panel on a 35 mm support rail.

These are DALI single-master controllers according to DALI standard EN 62386 part 101 and 102.

DALI devices with DALI interfaces according to EN 62386 type 0 and 1 are supported and can be integrated into a KNX building installation. The connection to KNX is made via the KNX connection terminal on the device shoulder.

The DALI gateways differ in the number of DALI outputs. These are equivalent and have the same technical features and functions.

Up to 64 DALI devices can be connected to each DALI output. Both "normal" lamps (DALI Type 0) and single battery emergency lights (DALI Type 1) may be connected to the DALI output.

The control of the luminaires via KNX is variable per DALI output

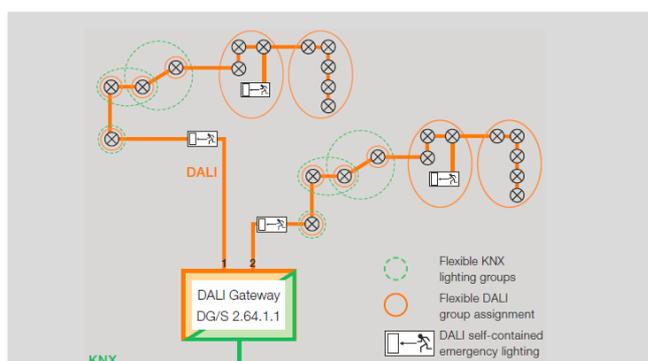
- Broadcast (all lights together)
- 16 lighting groups
- 64 Individual lights
- 16 scenes
- 64 single battery emergency lights

Objectives of the document

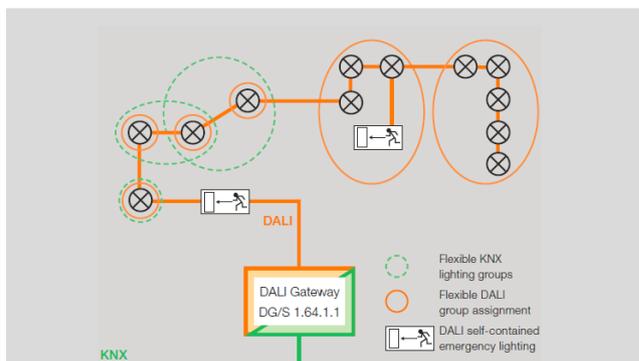
- A compact overview of the new features the new DALI Gateways Basic DG/S x.64.1.1.

Content

DG/S 2.64.1.1



DG/S 1.64.1.1



NEW IN DALI GATEWAY BASIC DG/S1.64.1.1 AND DG/S 2.64.1.1

GENERAL

Individual DALI participants, DALI groups and emergency lighting converters can be controlled at a DALI output via KNX

DALI output is 230V voltage resistance

DG/S 2.64.1.1

DG / S 2.64.1.1 provides two full-fledged DALI outputs

- 2 x 64 DALI participants
 - 2 x 16 DALI groups
 - 2 x 64 emergency light converter (single battery emergency light)
 - 2 x 16 Scenes
-

DG/S 1.64.1.1

DG/S 1.64.1.1 provides one full-fledged DALI output

- 1 x 64 DALI participants
 - 1 x 16 DALI groups
 - 1 x 64 emergency light converter (single battery emergency light)
 - 1 x 16 Scenes
-

COMMISSIONING AND DIAGNOSTIC FUNCTIONS

Simplified and fast programming through templates pages in ETS

Quick download by supporting long frames.

(from ETS5, for example, in conjunction with IPR/S and IPS/S 3.1.1)

Extended i-bus tool:

- Display DALI Telegram errors (framing errors)
 - Comparison groups / participants information from ECG and ETS programming
 - Reset monitoring of participants
 - Indication of remaining burn-in time
-

-
- Individual participants can be activated / deactivated
-
- Display operating states EVG / groups
(staircase light / slave / forcibly / locks ...)
-
- Testing individual participants and groups
-

DALI addressing trigger over manual condition on device

(an addressing or even exchange of a DALI participant can take place without ETS and without a software tool e.g. i-bus tool)

Automatic DALI addressing in the delivery state switched off

FUNCTIONS

Staircase lighting function with own timeline for each DALI participant or DALI group

Forcing / blocking individual participants or groups

Function Partial Failure

(Depending on the lighting, the remaining lighting can be switched on)

Function switch off brightness

(In the case of an OFF command, lighting is not switched off, but is set to the parameterized brightness value - Night operation in hospitals or nursing homes)

DALI Telegram load can be changed (pause between DALI QUERY parameterizable)

(Optimized operation in conjunction with CEAG emergency light switch)

After returning the participant, this can be controlled with a follow-up KNX value

After 230V gateway operating voltage recovery, KNX commands are sent immediately to the DALI

REST / INHIBIT Mode for emergency lighting converter (during emergency operation, emergency lighting can be deactivated)

Parameterizable transmit / receive delay (inactive wait time)

Group addresses max. 2000/4000 KNX assignments max. 2000/4000 (single / double)

Transition times (switch-on value, brightness value ...) to 65,535 seconds (approx. 18h)

PRODUCT SELECTION DIAL - DALI-GATEWAYS AND LIGHT CONTROLLER

	Gateway						Light Controller	
	DG/S 1.64.1.1	DG/S 2.64.1.1	DG/S 8.1	DG/S 1.1	DG/S 1.16.1	DGN/S 1.16.1	DLR/S 8.16.1M	DLR/A 4.8.1.1
GENERAL								
Supply voltage	85...265 V AC 110...240 V DC							
Type of installation	MDRC							SM
Module width (18 mm)	4	4	6	4	4	4	6	220 x 147 x 50 mm
Number of outputs	1	2	8	2	1	1	1	1
Light sensor inputs	-	-	-	-	-	-	8	4
Degree of protection	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP54
Integrated power supply	■	■	■	■	■	■	■	■
Number of DALI participants	64	2 x 64	8 x 16	2 x 64	64	64	64	64
Broadcast control	■	■	■	■	■	■	■	■
Number of group control	16	2 x 16	-	-	16	16	16	8
Individual control	64	2 x 64	-	64	-	-	-	-
Self-contained emergency lighting IEC 62 386-202	■	■	-	-	-	■	-	-
Manual operation	■	■	■	■	■	■	■	■
FUNCTIONS								
Enable/disable DALI address assignment	■	■	-	■	■	■	■	■
Switching, dimming, set brightness	■	■	■	■	■	■	■	■
Slave	■	■	■	■	■	■	■	■
Staircase lighting	■	■	■	■	■	■	■	■
Burn-in	■	■	■	■	■	■	■	■
Scenes	■	■	■	■	■	■	■	■
Forced/block	■	■	-	-	-	-	■	■
Sequence	-	-	-	-	■	■	-	-
Emergency lighting test	■	■	-	-	-	■	-	-
Partial failure	■	■	-	-	-	■	-	-
Constant light control	-	-	-	-	-	-	■	■

	Gateway						Lichtregler	
	DG/S 1.64.1.1	DG/S 2.64.1.1	DG/S 8.1	DG/S 1.1	DG/S 1.16.1	DGN/S 1.16.1	DLR/S 8.16.1M	DLR/A 4.8.1.1
Reaction on KNX bus voltage failure	■	■	■	■	■	■	■	■
Reaction on KNX voltage recovery	■	■	■	■	■	■	■	■
Reaction on DALI bus voltage failure	■	■	■	■	■	■	■	■
Reaction on DALI voltage recovery	■	■	■	■	■	■	■	■
Power on level	■	■	–	–	■	■	■	■
Device or lamp fault	■	■	■	■	■	■	■	■
Cyclic monitoring telegram	■	■	■	■	■	■	■	■
DALI telegram rate modifiable	■	■	–	–	–	–	–	–

COMMISSIONING AND DIAGNOSTIC FUNCTIONS

Control and diagnosis via ABB i-bus® Tool	■	■	–	■	■	■	■	■
Device assignment	■	■	–	■	■	■	■	■
Group assignment	■	■	–	■	■	■	■	■
Fault DALI device	■	■	–	■	■	■	■	■
Fault lamp	■	■	–	■	■	■	■	■
Function test	■	■	–	■	■	■	■	■
Constant light control	–	–	–	–	–	–	■	■
Emergency lighting	■	■	–	–	–	■	–	–

References to other documents

- [FAQ Home and Building Automation](#)
- [FAQ DALI](#)
- [Engineering Guide Database](#)