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ABB STOTZ-KONTAKT GmbH
DALI-Gateway DG/S 1.16.1

ABB i-bus® DALI Gateways DG/S
Technical differences

- KNX / DALI Gateway DG/S 8.1
  - 8 independent DALI outputs with each up to 16 DALI devices
  - Light groups by wiring
  - No DALI addressing necessary
- KNX / DALI Gateway DG/S 1.1
  - Number of light groups only limited by KNX
  - Individual addressing and control of all 64 devices
  - DALI addressing necessary (DG/S Tool)
- KNX / DALI Gateway DG/S 1.16.1 New
  - 16 flexible light groups with up to 64 DALI devices
  - For grouping no assignment via ETS necessary
  - DALI addressing and grouping necessary (DG/S Tool)

ABB i-bus® DALI Gateways DG/S
Pro & Contra

	DG/S 8.1	DG/S 1.1	DG/S 1.16.1
Flexibility	**0** Control 8 hardware light groups	++ Control all of the 64 DALI devices individual	++ Control 16 software arranged light groups
Simultaneous dimming of light groups	++ Simultaneous dimming of the devices in the light group	+ Light groups > 6 devices a stepped dimming is visible	++ Simultaneous dimming of the devices in the light group
KNX functions per group	++ 9 KNX objects per light group	+ 3 KNX objects per light group	+ 6 KNX Objects per light group
Additional Functions	+ Scene, Dynamic, Burn-In, Slave	+ Scene, Dynamic, burn-In, Slave	++ Sequence, Scene, Staircase lighting Slave, Burn-In
Programming	++ Per characteristic up to 8 parameters must change	0 Per characteristic up to 64 parameters must change	+ Per characteristic up to 16 parameters must change
Commissioning	++ No addressing is necessary	0 Addressing of 64 devices	0 Addressing of 64 devices and assigned them in 16 light groups

++ very good / simple, fits completely requirements

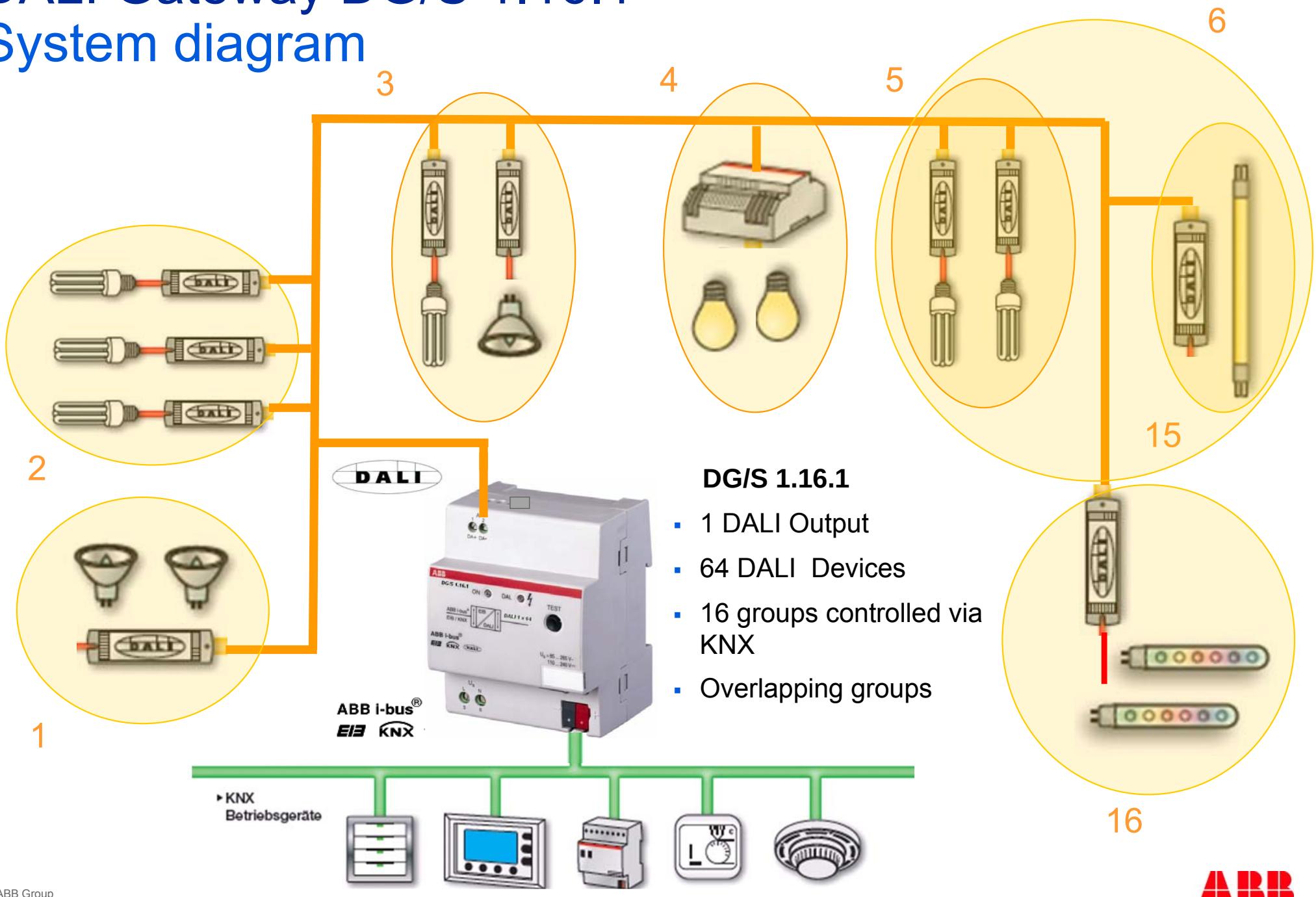
\+ medial, fits requirements

0 low / extensive, fits partly requirements

DALI Gateway DG/S 1.16.1
Technical Data

- ABB i-bus® KNX
- DIN Rail Device, *proM* Design
- 1 DALI Output for 64 DALI devices
- 16 DALI Groups
- 110…240 V AC/DC
- Manual Operation

DALI Gateway DG/S 1.16.1
System diagram



DG/S 1.16.1

- 1 DALI Output
- 64 DALI Devices
- 16 groups controlled via KNX
- Overlapping groups

DALI Gateway DG/S 1.16.1
Basic Characteristics

- **Map 16 DALI-Groups with 64 DALI-Devices on KNX**
  - Thereby lighting groups with a great number of DALI Devices can be controlled simultaneous
  - A DALI device could be member in more than one lighting group (Overlapping lighting groups)
- **DALI-Devices can be controlled via KNX only with 16 lighting groups**
  - Programming work is minimized
- **Great possibilities to visualized DALI failures via KNX**
  - Per group a Lamp-, Ballast- or Lamp ≥ Ballast failure can assigned
  - With coded status object you have the possibility to assigned the failure status of each of the 64 DALI devices
  - Over separate objects the hole quantity of DALI failures and the group or device number of the faulty DALI device is send via KNX
  - The failure telegrams can be blocked via 1 Bit Communication Object. E.g. a system-depended DALI fault telegram can be blocked during the regular test phase of an emergency lighting control system.

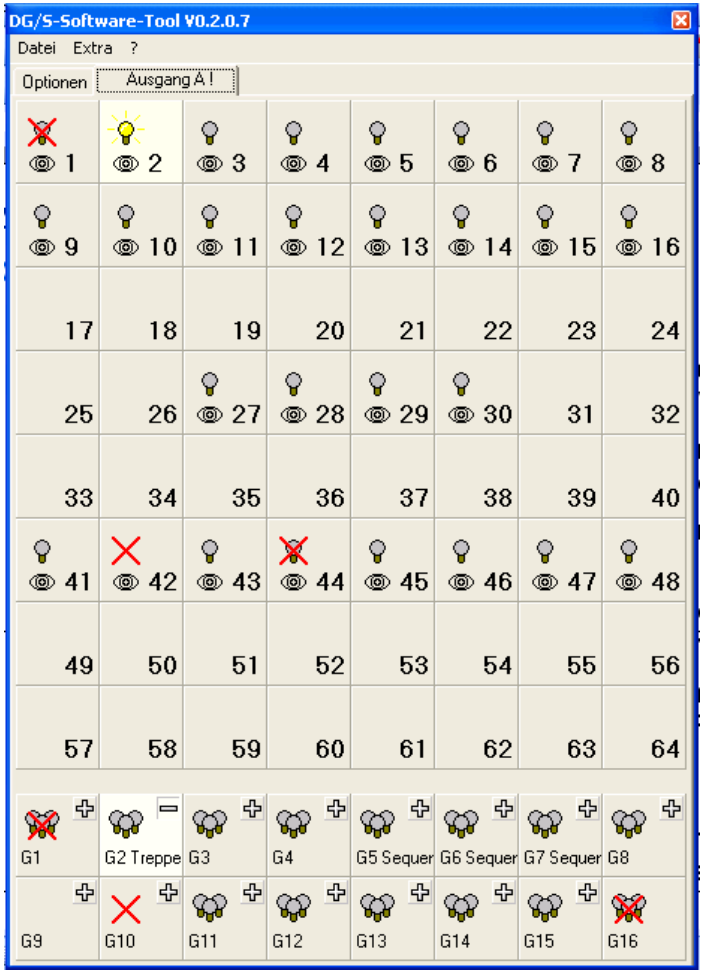
DALI Gateway DG/S 1.16.1
Basic Characteristics

- **Set Power-On level of the DALI Device via KNX**
  - This brightness value (Power-On level) is stored in the ballast and is thus set immediately after the ballast operating voltage recovery.
- **Set DALI-Fading Time via KNX**
  - Special lighting time-settings, e.g. for color lighting, can controlled flexible and individually via a central visualization for the project
- **14 Light Scenes**
  - Recall Scene via 1Byte-KNX-Scenen-Object or 1Bit-Telegramm
  - Store individual Scene-brightness via KNX
- **Per Parameter automatic DALI address assignment inhibit**
  - DG/S 1.16.1 does not change the DALI address of DALI devices automatically
- **DALI light characteristic adjustment**
  - DALI light Characteristic could linearised. Therefore it is possible to increase the resolution of the KNX control signal

DALI Gateway DG/S 1.16.1
Basic Characteristics

- **Slave-Function**
  - Include DALI Gateway in energy efficient lighting control systems
  - Reaction on switch, dim, scene and brightness commands are parameterized
- **Sequence-Function**
  - Up to 10 scenes could string together
  - Repeated the sequence between 1 and 254 or continuous repetition
  - Light effects and running lights could realized without additional time or logic devices
- **Staircase lighting-Function**
  - Warning before light turned off
  - Basis brightness
- **Burn-In-Function is available**
  - During the phase of commissioning electrical discharge lamps it is possible to allow the switching of the lamps only with 0% or 100% brightness

DALI Gateway DG/S 1.16.1
Software Tool



- Indication - and Configuration - Mode (analog DG/S 1.1)
- DALI devices addressable individually (analog DG/S 1.1)
- DALI devices assign into light groups
- Ballast- and Lamp-Failures will shown directly
- Light group name are take over from the ETS parameterization
- Adjustment from light group and gateway information.

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