

AUGUST 2017

SUG/U 1.1 Split Unit Gateway

Product presentation

STO/GPS, Product Management

Agenda

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Split Unit Gateway

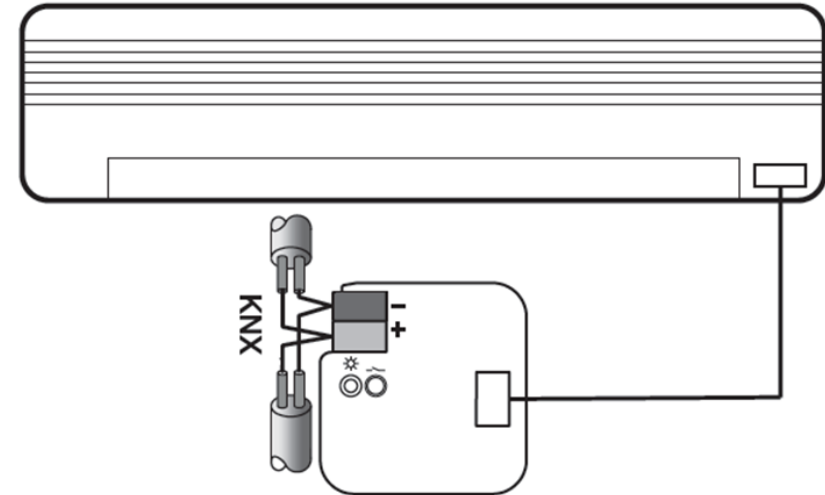
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What is a Split Unit Gateway?

The Split Unit Gateway forms the interface between the KNX system and climate control equipment from a wide range of manufacturers, also referred to as split unit.

The Split Unit Gateway is installed near the split unit and the transmitter of the supplied cable is bonded to the receiver of the unit itself. Thereafter, the climate control equipment no longer receives commands from a remote control but instead can be operated via any KNX sensors or via a visual display.

The split unit's functions can therefore be operated via KNX using any operating element.



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Functionality 1

The following functionality* can be controlled via KNX:

- Switch split unit On/Off
- Send setpoint temperature
- Select operating mode (Automatic, Heating, Cooling, Ventilation, Drying)
- Select fan stage (Automatic, Low, Med, High)
- Enable/disable horizontal and vertical swing
- Enable/disable Silent Mode

* Only if supported by the specific split unit model



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Functionality 2

Additionally, the Split Unit Gateway supports enhanced KNX functions which allow full integration into building automation:

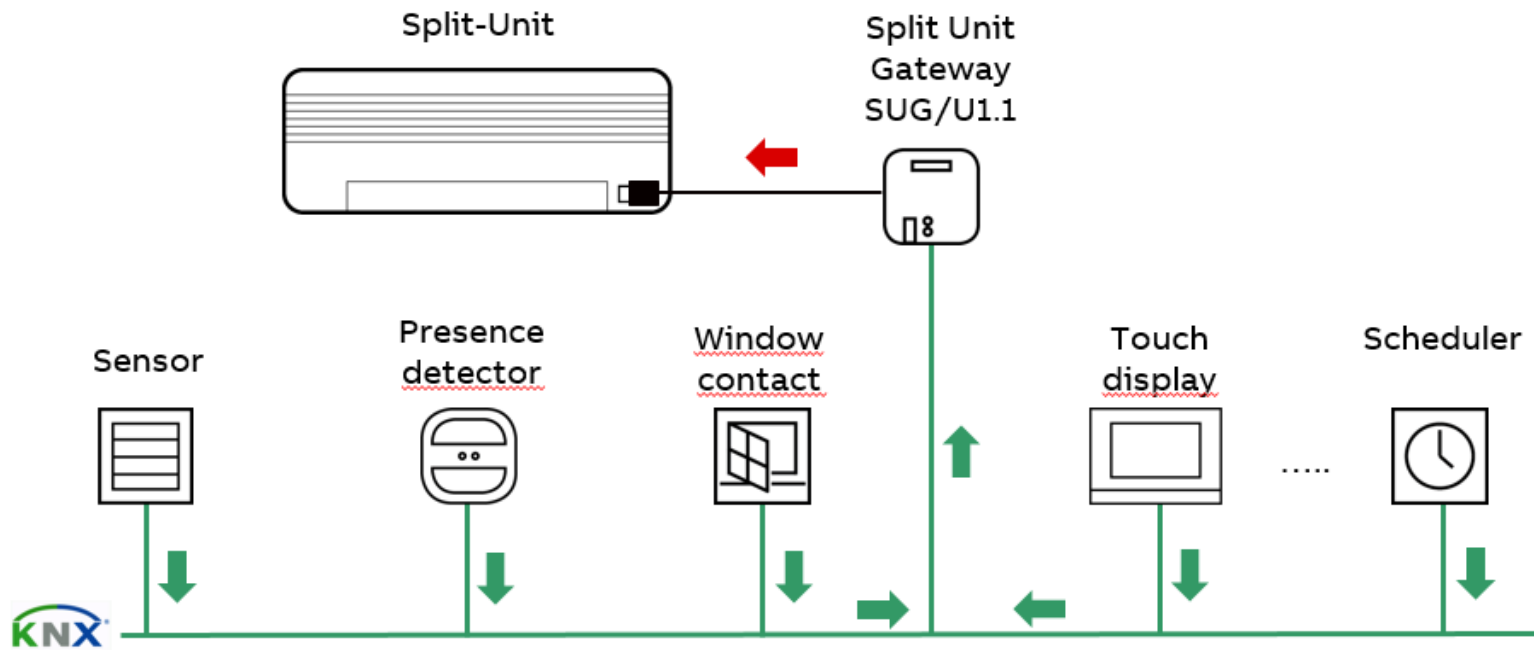
- Forced operation (The split unit can be set to a certain state, e.g. for maintenance purposes)
- Window contact (When a signal of an open window is received from KNX, the Split Unit switches off)
- Presence (Depending on the room occupation, the Split Unit can adjust operating parameters)
- Scene
- Boost



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System overview

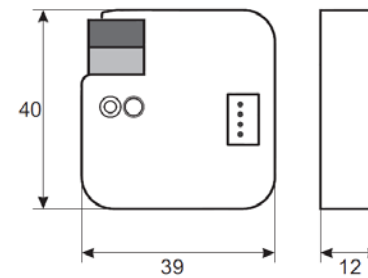
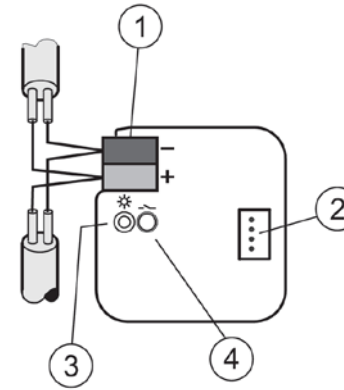


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Technical information

- Device can be installed in a flush-mounted or surface-mounted installation box
- The transmitter of the supplied IR cable (2m) is bonded to the receiver of the split unit
- No auxiliary voltage necessary (power from KNX)
- Dimensions 39 x 40 x 12 mm (H x W x D)



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Commissioning

- The commissioning is done with a standard KNX application program
- To select the manufacturer and model of the remote control, there is a KNX APP available
- The APP can be downloaded free of charge from the KNX Online Shop of the KNX Association
- The APP allows very economic parameterization of the Split Unit Gateway (for all Gateways in the project the remote model can be selected at once)
- The ETS APP shows the functions supported by the specific remote control which is very convenient for commissioning

Split Unit

Manufacturer

DAIKIN

Remote (type)

APGS02

Version 1

Set point temperature range

16...30 °C

Operating modes

Cooling, Ventilation, Drying

Fan speeds

Automatic, Low=1, Medium=2, High=3

Swing

Vertical

Silent mode

Not supported

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Diagnosis – i-bus Tool®

- For diagnostic purposes, the i-bus Tool is available
- The tool shows (like the ETS APP) which functions are supported by the remote control
- This information is relevant for commissioning of the device.

Functions supported by Split Unit

Manufacturer	AIRWELL
Remote (type)	RC4
Setpoint temperature range	18...36°C
Operating modes	Automatic, Heating, Cooling, Ventilation, Drying
Fan speeds	Automatic, Low=1, Med=3, High=5
Vertical swing	Supported
Horizontal swing	Supported
Silent mode	Supported
Access to i-bus®Tool	Read and write

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Diagnosis – i-bus Tool®

- The status of all functions is shown and all functions can be controlled for testing purposes
- Even without group addresses being connected, the i-bus Tool can be used to control the device
- The software features a function to send cyclically the setpoint temperature. This can be used to position the IR transmitter.

The screenshot displays the 'KNX functionality' control panel. It includes the following elements:

- On/off:** A green 'On' button and a grey 'Off' button.
- Switching off delay activated:** A grey checkbox.
- Temperature controls:** A setpoint temperature input field showing '21 °C' with a refresh icon. Below it are 'Max. heating setpoint temperature' (33°C) and 'Min. cooling setpoint temperature' (16°C). A 'Setpoint temperature limit activated' checkbox is also present.
- Send setpoint temperature cyclically:** A grey button labeled 'Start' with the text 'Send setpoint temperature cyclically to test positioning of sending unit.' above it.
- Operating mode:** A row of buttons: 'Automatic' (green), 'Heating', 'Cooling', 'Ventilation', and 'Drying'.
- Fan speed:** A row of buttons: 'Automatic', 'Low' (green), 'Med', and 'High'.
- Vertical swing:** A row of buttons: 'On' (green) and 'Off'.
- Horizontal swing:** A row of buttons: 'On' and 'Off' (green).
- Silent mode:** A row of buttons: 'On' (green) and 'Off'.
- Scene number:** An input field showing '46', up/down arrow buttons, and 'Recall' and 'Save' buttons.
- Forced operation, Window contact, Presence:** Three vertically stacked grey checkboxes.



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