2 Device technology

Using the Telephone Gateway, it is possible to send configurable voice messages via the telephone network. In addition to the voice messages, e-mails and SMS messages can also be sent.

If the device is called, it is possible to navigate through a menu using dial tones (DTMF), in which states can be queried and commands can be executed.

The device has an integrated web server which enables simple operation and parameterisation via the LAN.

The device can be powered with 230 V AC and/or 12 V DC.

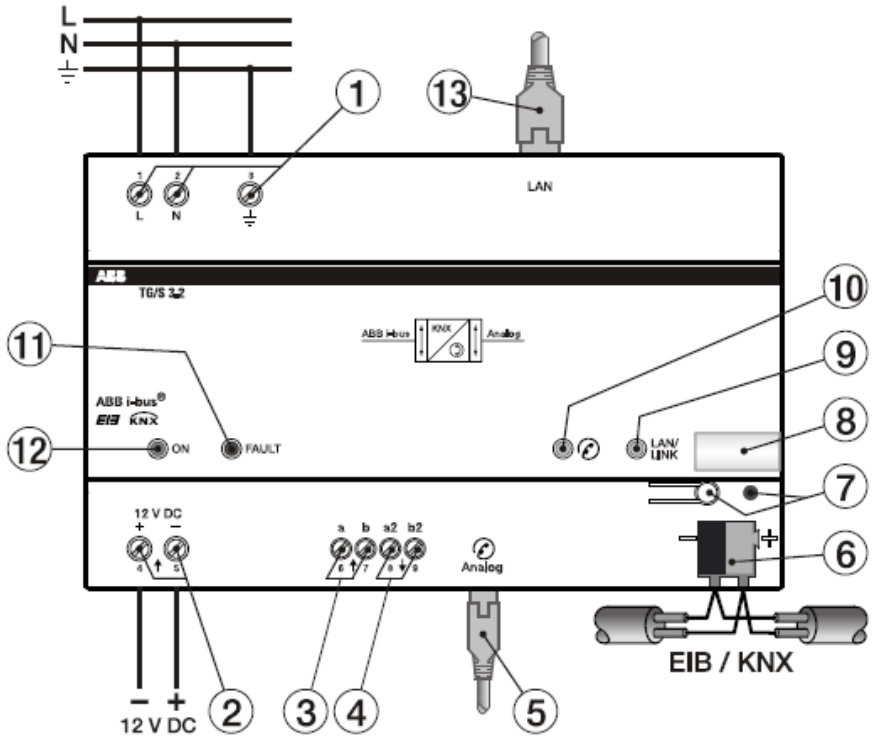
2.1 Technical data

Power supply:	- Via mains or auxiliary voltage	
	- Mains voltage range	90...265 V AC , 50/60 Hz
	- Auxiliary voltage range	10…30 V DC
	- Power consumption	Max. 2.5 W at 230 V AC Max. 2.5 W at 12 V DC
	- Total power consumption	Max. 3.0 W, typical 2.3 W
Bus voltage KNX:	- Current consumption	Max. 10 mA
Connections:	- KNX	Bus connection terminal
	- Mains voltage, auxiliary voltage	Screw terminal 0.2 … 2.5 mm^2 stranded 0,2 ... 4 mm^2 single-core
	- Telephone connection terminals	Screw terminal 0.2 … 2.5 mm^2 stranded 0.2 … 4 mm^2 single-core
	- Tightening torque	Max. 0.6 Nm
	- Telephone connection plug-in	RJ11 socket
	- LAN connection	RJ45 socket
Operating and display elements:	- ON LED green	Display for operation readiness
	- FAULT LED, red	Displays an internal device fault (e.g. application program not loaded)
	- ✆ LED, green	Displays that the device is dialling (flashing) / connection successfully established
	- LAN/LINK LED, yellow	Displays the connection to a network and telegram traffic (flashes)
Internal real-time clock	- Power reserve at voltage failure	10 h
Degree of protection:	- IP 20	to DIN EN 60529
Safety class:	- II	to DIN EN 61140
Isolation category:	- Overvoltage category	III to DIN EN 60664-1
	- Pollution degree	2 to DIN EN 60664-1
Temperature range:	- Operation	-5° C ... + 45° C
	- Storage	-25° C ... + 55° C
	- Transport	-25° C ... + 70° C
Design:	- Modular installation device (MDRC)	Modular installation device, ProM
	- Dimensions	90 x 144 x 64 mm (H x W x D)
	- Mounting width	8 modules at 18 mm
	- Mounting depth	68 mm
Installation:	On 35 mm mounting rail	to DIN EN 60 715
Mounting position:	as required	
Weight:	0.257 kg	
Housing, colour:	Plastic, grey, halogen free	
Approvals:	KNX to EN 50 090-1, -2	
CE mark:	in accordance with the EMC guideline and low voltage guideline	

Application program	Number of Communication objects	Max. number of group addresses	Max. number of associations
Notification Remote Control/2.0.	118	254	255

Note The programming requires EIB Software Tool ETS2 V1.3 or higher. If ETS3 is used a ".VD3" type file must be imported. The application program is available in the ETS2 / ETS3 at ABB/communication/telephone.

2.2 Circuit diagram



1: 230 V AC connection

2: 12 V DC connection

3: Terminal for telephone connection (exchange)

4: Terminal for outgoing telephone connection
for looping

5: Telephone connection (exchange), RJ11 socket

6: KNX bus connection

7: Programming LED with programming button

8: Label carrier

9: LAN / LINK LED

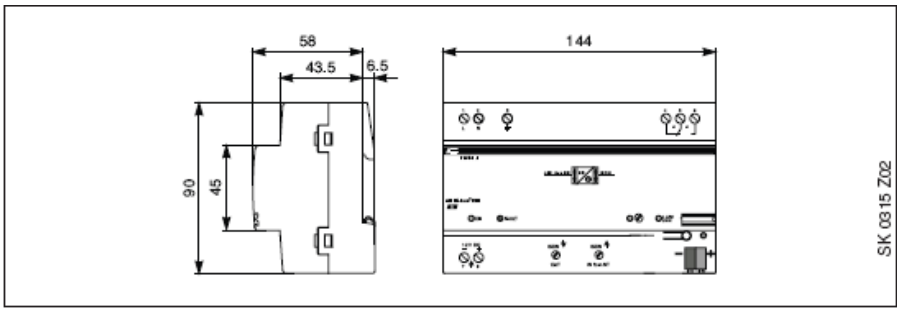
10: LED for telephone connection

11: LED for fault indication

12: Operation LED

13: LAN / Ethernet connection

2.3 Dimension drawing



2.4 Assembly and installation

Accessibility to the device for the purpose of operation, testing, visual inspection, maintenance and repair must be must be provided (conform to DIN VDE 0100-520).

Supplied state

The Telephone Gateway is supplied with the physical address 15.15.255. The IP address is set to 192.168.0.222.

2.5 Scope of delivery

The following is included in the scope of delivery for the Telephone Gateway:

- TG/S 3.2 device with bus connection terminal
- Telephone connection cable RJ11, black
- Adapter RJ11 to TAE, black
- Crossover network cable, grey
- Installation and operating instructions

2.6 Description of the inputs and outputs

Supply voltage input 230 V AC (terminals 1, 2, 3)

The 230 V AC supply voltage of the TG/S is connected to terminals 1, 2 and 3. Once the supply voltage has been connected to the system, a start routine is executed in the device. As soon as it is ready for operation (max. 150 s after connecting the supply voltage), the ‘ON’ LED on top of the device lights up.

Supply voltage input 12 V DC (terminals 4, 5)

As an alternative to the 230 V AC supply, it is possible to connect a 12 V DC supply voltage to terminals 4 and 5. Once the supply voltage has been connected to the system, a start routine is executed in the device. As soon as it is ready for operation (max. 150 s after connecting the supply voltage), the ‘ON’ LED on top of the device lights up. Supply via 12 V DC is primarily a good idea if a 12 V backup supply is available.

Note: The supply voltage on the 12 V connection must be 10 V … 30 V DC. Otherwise the device may be damaged!

Bus connection

The bus connection terminal supplied is used for connection to the KNX.

Telephone connection (RJ 11 or terminals a, b)

For connection to the telephone network, you can either use the supplied RJ11 connection cable or wire the telephone line to terminals a and b. You can find the pin assignment of the RJ11 socket in the appendix.

If you wish to loop through the telephone line, you can use terminals 2a (=a2) and 2b (=b2).

LAN connection

The network connection is carried out via an Ethernet RJ45 interface for LAN networks. The network interface can be operated with a transmission speed of 10 or 100 Mbit/s. The connection to a network is indicated by the *LAN/LINK* LED on the top of the housing.

A normal patch cable is required to connect to the LAN network.

The enclosed crossover network cable is used for direct connection of the Telephone Gateway to the network card on the PC.

2.7 LED display on the device

ON LED, green	**Operation** *LED flashes:* - Device starts *or* - After programming of the device with the ETS the modified data is transferred to the device *or* - The flashing function has been triggered with the TG software tool *LED continuous on:* The device functions correctly.
FAULT LED, red	**Device fault** *LED flashes:* Internal fault (e.g. with initialisation of the internal modem) *LED continuous on:* The application program in the KNX bus coupler does not operate. Possible causes: - The application program has been removed - The device is programmed with the ETS - The KNX bus voltage has failed - The KNX bus voltage is not connected
LED, green	**Telephone connection active** LED flashes: An attempt to establish a connection (dialling) LED continuous on: Connection successfully established
LAN/LINK LED, yellow	**Network traffic** Displays the connection to a network and telegram traffic (flashes)