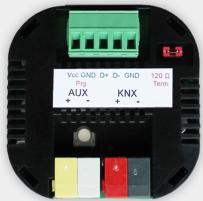
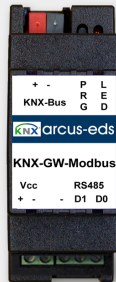


Modbus Gateways

KNX-GW-MODBUS-SK07 RS485 / RS232	KNX-GW-MODBUS-REG RS485	KNX-GW-MODBUS-SK10 RS485
Article no.: 40300007 RS485 Article no.: 40310007 RS232	Article no.: 40300002	Article no.: 40300010
		
In-wall mounting	DIN rail mounted device 2TE	On-wall mounting Available from 2nd quarter 2025

Device description

Application: KNX bus coupling of meters with Modbus/RTU interface.
The bus coupler represents a bus master of the Modbus/RTU interface.
A connection can be realised via RS485 (maximum 32 devices incl. master).

An RS232 (P2P) can also be selected for the in-wall version.

The interface cannot be changed via the application.

There are 32 Modbus data points available, which can be freely allocated to the devices used.

Functions

- Interface configuration: Baud rate / parity
- Value adjustment: Multiplier / Offset
- KNX DPT adjustable

Technical data

KNX-GW-MODBUS-SK07	
Supply voltage	KNX 21 .. 32V DC
KNX load	10mA
Input auxiliary voltage	24 .. 32V DC / max. 100mA
Auxiliary voltage for ModBus devices	12V DC / max. 100mA
Operating / storage temperature	-25 .. +80°C / -25 .. +80°C
Consumption data points	32 frei aufteilbar
ETS application	KNX-GW-ModBus
Plastic housing	(50 x 50 x 20) mm / 58mm Diagonale für eine standard Unterputzdose
Protection class	IP20
Article number RS485	40300007
Article number RS232	40310007

KNX-GW-MODBUS-REG	
Supply voltage	KNX 21 .. 32V DC
KNX load	10mA
Input auxiliary voltage	24 .. 32V DC / max. 100mA
Operating / storage temperature	-25 .. +80°C / -25 .. +80°C
Consumption data points	32 frei aufteilbar
ETS application	KNX-GW-ModBus
Plastic housing	Reiheneinbaugerät 2TE
Protection class	IP20
Article number	40300002

With KNX-GW-MODBUS-REG, there is galvanic isolation between ModBus and KNX.
For this reason, no auxiliary voltage is provided for ModBus devices.

KNX-GW-MODBUS-SK10	
Supply voltage	KNX 21 .. 32V DC
KNX load	10mA
Input auxiliary voltage	24 .. 32V DC / max. 100mA
Auxiliary voltage for ModBus devices	12V DC / max. 100mA
Operating / storage temperature	-25 .. +80°C / -25 .. +80°C
Consumption data points	32 frei aufteilbar
ETS application	KNX-GW-ModBus
Plastic housing	(72 x 64 x 40) mm
Protection class	IP54/65
Article number	40300010

ETS Setting

General Settings

1.1.1 KNX-GW-ModBus > General Settings

General Settings	Modbus Reading Cycle	10 sec
Channel 1: Voltage L1-N	KNX Writing Cycle	1 min
Channel 2: Power PH1	Timeout	1,0 sec
Channel 3: DT	Baudrate	9600
	Parity	none
	Number of required Channels	3

Parameter	Setting	Description
Modbus Reading Cycle	10 sek. - 12 h	The measured values are read from the Modbus device in the set cycle time.
KNX Writing Cycle	1 min. - 12 h	The measured values are sent in the set cycle time regardless of a measured value change.

Parameter	Setting	Description
Timeout	500 ms - 2,5 sek.	If a transmission error lasts longer than the set time, the error bit is set. Default value : 1 second
Baudrate Parity	300 - 115200 even odd none	The serial communication parameters must be set here.
Number of required Channel	1 - 32	Number of required data points.

Channel x

1.1.1 KNX-GW-ModBus > Channel 1: Voltage L1-N

General Settings	Channel ☐ unconfigured ☒ configured
Channel 1: Voltage L1-N	Comment Voltage L1-N
Channel 2: Power PH1	Setup Send Cyclically ☐ No ☒ Yes Send on Chance ☐ No ☒ Yes ID 1 Register Number (Register 1 is located at Address 0) 3028
Channel 3: DT	Correction Multiplier 1 Offset 0
	KNX Length 32 Bit Type Float
	Modbus Register Type Holding Register Custom Type (Swap Bytes) ☒ No ☐ Yes Length -- A -- 32 Bit float

Parameter	Setting	Description
Channel	Radio button	- unconfigured - configured
Comment	up to 64 characters	Naming of the channel
Setup		
Send Cyclically	Radio button	- No - Yes
Send on Change	Radio button	- No - Yes
ID	1 - 247	Each bus device must have a unique address.
Register Number	1 - 65535	Address of the relevant register.
Correction		
Multiplier Offset	-3,4E-38 - 3,4E+38 -3,4E-38 - 3,4E+38	This setting can be used to convert the measured value into a desired value. e.g. Price / kWh = 0,38€ Multiplier: 3,8E-1 , Offset: 0
KNX		
Length	1 Bit 8 Bit 16 Bit 32 Bit Metering Value	Length of the KNX data types
Type	unsigned integer signed integer float	Selection of the KNX data types
Modbus		
Register Type		Modbus Register type
Custom Type (Swap Bytes)		Values from the Modbus are always 2-byte registers. In the event that a measured value is only 1 byte long, if necessary, the high and low byte can be swapped.
Length		Length of the Modbus data type
Value Information Field		KNX Association Datapoint Types
Exponent	$\times 10^{-7}$ - $\times 10^7$	Value adjustment

Only with selection **KNX** Length = Metering Value

KNX

Length

Metering Value ▼

Modbus

Register Type

Holding Register ▼

Custom Type
(Swap Bytes)

☒ No ☐ Yes

Length

-- A -- 32 Bit float ▼

Value Information Field

Energy [Wh] ▼

Exponent

x 1 ▼

In Case of Bus Voltage Recurrence

The values of the ModBus devices are available again after they have been read in again.

The ETS parameter settings are retained.

Discharge Program and Reset Sensor

In order to delete the programming (projecting) and to reset the module back to delivery status, it must be switched off (disconnect the KNX bus).

Press and hold the programming button while reconnecting the KNX bus and wait until the programming LED lights up (approx. 5-10 seconds). Now you can let go of the programming button and the module is ready for a new project planning.

If you let go of the programming button too early, repeat the procedure.

Imprint

Editor: Arcus-EDS GmbH, Rigaer Str. 88, 10247 Berlin

Responsible for the content: Hjalmar Hevers, Sascha Bergmann

Reprint, also in part, only permitted with the approval of Arcus-EDS GmbH.

All information without guarantee, technical changes and price changes reserved.

Liability

The selection of the devices and the determination of the suitability of the devices for a certain intended use are only in the buyer's responsibility. For this there is none liability or warranty assumed. The information in the catalogs and data sheets is not an assurance of special properties, but result from experience and measurements. Liability for damage caused by incorrect operation/project planning or malfunctions of the devices is excluded. Rather, the operator/projector must ensure that incorrect operation, misconceptions and malfunctions cannot cause any further damage.

Safety regulations

Danger! Installation and assembly of electrical devices may only be carried out by an electrical specialist. Compliance with the corresponding safety regulations of the VDE, TÜV and the responsible Energy supply companies must be ensured by the buyer/operator of the system. No guarantee is assumed for defects and damage caused by improper use of the devices or by not observing the operating instructions.

Warranty

We provide warranty within the scope of the legal provisions. In the event of a malfunction, please contact us and send the device with an error description Our company address mentioned below.

Manufacturer



Arcus-EDS GmbH
Rigaer Str. 88
10247 Berlin

Disposal



The symbol of the crossed -out garbage bin on the device or the packaging means that the product at the end of his service life may not be disposed of with other general waste.

Registered trademarks



The CE sign is a free traffic sign that turns exclusively to the authority and none Assurance of properties.



Registered trademark of the Konnex Association