

### Copyright Clarify

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The user manual refer to the following device:

SATION-GW2302.0201

### Version

Version	Release Date	Remark
V1.0	March 27th, 2018	1st Release



### Notice

1. Please read this user manual carefully before using the product.
2. This product is used in indoor environment and installed in electrical control box.
3. Please install this product in a dry and ventilated place.
4. Before power on, please confirm the input voltage according to the manual; after power on, please confirm the normal output Voltage before connecting to the control bus.
5. Please make sure the secure shell is in good condition, if the shell is damaged, please stop using to avoid accident.
6. This product is NOT a toy, please make sure it is out of children touch.
7. Only be suitable for EIB/KNX system bus.
8. Others:

The below sign indicates this product can't be dealt as ordinary family rubbish, in order to avoid the possible environment and human health harm caused by the electrical waste, this product must follow recovery processing. Please contact the local recycling department after this product is scrapped, to make sure it can go as the right waste processing procedure.



## 1. Technical Parameters

External Power supply	10~30 VDC
Installation	Install on 35 mm DIN rail (according to EN 60529)
Shell Material	Plastic case
Safety class	II
Weight	80 g
Modular device	2UM (1UM = 18 mm)
Dimension	36 x 90 x 63 mm (WxHxD)
Operating temperature	-40 ... + 85°C
Stock temperature	-25 ... + 55°C
Relative humidity	93% non-condensing

## 2. Function Overview

GW2302.0201 is a KNX modular unit for installation in the distribution board on 35 mm mounting rails. It allows you to exchange information with one or more slave devices over a RS485 differential serial network through Modbus RTU (Remote Terminal Unit) protocol. GW2302.0201 acts as Modbus Master. The information exchanged over the Modbus network are updated over the KNX network by means of a twisted pair (TP) communication cable.

The KNX Serial Gateway is bidirectional. It receives data telegrams on the KNX Bus and generates serial telegrams using the internal interface program. A new KNX telegram can also be created when a serial telegram is received.

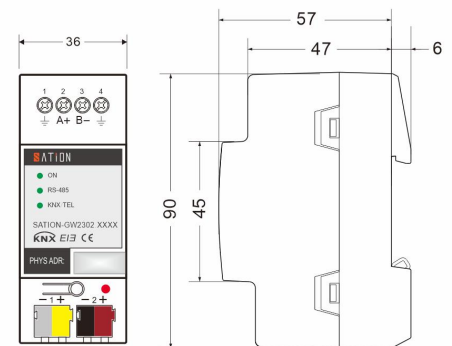
Likewise, GW2302.0201 can make requests to cyclically readings KNX communication objects or acquire their values during data exchange over the bus. Cyclically or on event of change of the communication objects, data are written on the Modbus registers of one or more configured devices.

GW2302.0201 supports the entire Modbus RTU master protocol with the possibility of reading and writing single and multiple 1-bit registers (Coil and Status) as well as 16-bit registers (Holding

and Input). It is also possible to read and write multiple registers containing 32-bit floating point values (IEEE 754 format).

As for KNX communication, 1-bit, 1-byte, 2-byte and 4-byte communication objects can be acquired: internal conversion functions allow you to convert the information from and to 16-bit floating point values (DPT 9.xxx) starting from integer Modbus registers. Configuration is performed through a PC application software called ETS.

## 3. Product Dimensions



## 4. Wiring Diagram

Modbus side

- RS485 serial communication port, electrically isolated from KNX Bus, 120 Ohm termination resistance is included by default.
- Modbus master RTU (Remote Terminal Unit) communication

- Selectable baud rate from 2400 to 115200 baud
- Device addressing from 1 to 255
- Coil, Input, Holding Register e Input Register data exchange
- Single and multiple register reading/writing

**Power side**

External power supply range from 10V DC to 30V DC.

KNX TP (Twisted Pair) communication port set to 9600 baud, electrically isolated from external power supply.

**Display elements**

If external power supply is OK, the ON led ON, otherwise the ON led OFF.

The RS-485 led indicates Modbus communication.

The KNX/TEL led indicates KNX communication.

Push button that switches between normal mode and KNX physical address programming, the programming led on indicates the product is in programming mode.

