RESI-KNX-ASCII
Communicate with your host with ASCII protocol with a KNX/EIB network

ASCII
Modbus-IDA
the architecture for distributed automation
Konnex Association

Our KNX ASCII converter is a bridge between standard host computers with an MODBUS/RTU or ASCII interface and KNX networks. The gateway is connected to the host via RS232 or RS485 interface. With our MODBUS configurator software tool, you can generate a mapping table between the internal registers and the KNX group addresses for our converter. This product is an ideal solution to enable controller, which do not support a native KNX interface, to exchange data with a KNX network. This affects standard PLCs like SIEMENS®, SCHNIEDER® or BECKOFF®, but also DDCs, mini computer like the Raspberry PI®, standard PCs or touch panels.

RESI-KNX-ASCII

This product convinces with a very simple configuration of the mapping between the internal registers and KNX groups. With this internal registers you can read the KNX groups, but you can also write to KNX groups.

The converter supports the following data formats on the KNX side: BIT, TWOBITS, FOURBITS, SIXBITS, CHARACTER, UINT8, SINT8, UINT16, SINT16, FLOAT16, TIME, DATE, UINT32, SINT32, FLOAT32, STRING, GENERIC, DATETIME

On the serial side the converter supports the following data types: UINT16, SINT16, UINT32, SINT32, UINT32R, SINT32R, FLOAT32, FLOAT32R, DOUBLE64, DOUBLE64R, GENERIC, ASCII

An additional scaling factor allows the adaption of the number range in the internal register. Configuration is done with our free software tool MODBUS configurator.
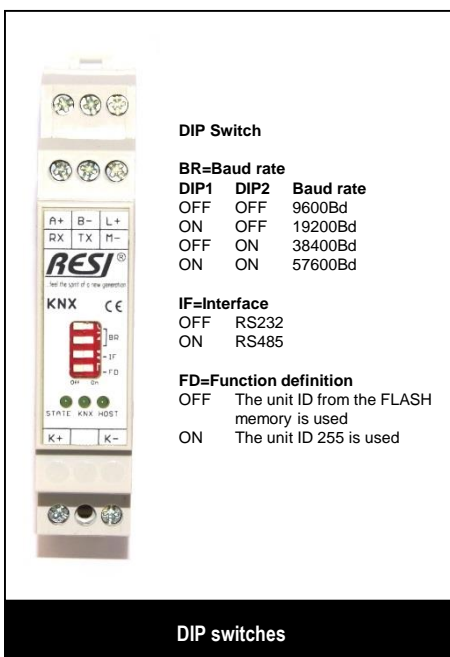
RESI-KNX-ASCII

Connects a host with MODBUS/RTU or ASCII interface to EIB/KNX bus, Host communication: via RS232 or RS485 with MODBUS/RTU or ASCII protocol, Host baud rates: 9600, 19200, 38400 or 57600Bd, no or even parity, 8 data bits, 1 stop bit, all 32768 EIB/KNX groups are supported, Galvanic insulation between EIB/KNX and serial interface, mapping table size: 300 configuration entries, configuration of EIB/KNX groups, internal registers and datatypes with our free PC software MODBUS configurator, Weight: 55g, Dimension (LxWxH): 17,5x90x58mm, Power supply: 24V=, Power consumption: <0.5W, Mountable onto a EN50022 DIN rail.
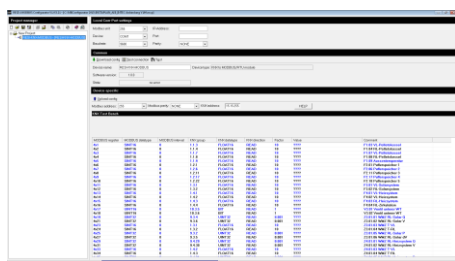
MODBUS register	MODBUS datatype	MODBUS interval	KNX group	KNX datatype	KNX direction	Factor	Value	Comment
4x1	SINT16	0	1.1.3	FLOAT16	READ	10	????	F1.03 VL-Pelletskessel
4x2	SINT16	0	1.1.4	FLOAT16	READ	10	????	F1.04 RL-Pelletskessel
4x3	SINT16	0	1.1.7	FLOAT16	READ	10	????	F1.07 VL-Pelletskessel
4x4	SINT16	0	1.1.8	FLOAT16	READ	10	????	F1.08 RL-Pelletskessel
4x5	SINT16	0	1.1.9	FLOAT16	READ	10	????	F1.09 Aussentemperatur
4x6	SINT16	0	1.2.1	FLOAT16	READ	10	????	F2.01 Pufferspeicher 1
4x7	SINT16	0	1.2.6	FLOAT16	READ	10	????	F2.06 Pufferspeicher 2
4x8	SINT16	0	1.2.11	FLOAT16	READ	10	????	F2.11 Pufferspeicher 3
4x9	SINT16	0	1.2.17	FLOAT16	READ	10	????	F2.17 Pufferspeicher 4
4x10	SINT16	0	1.2.22	FLOAT16	READ	10	????	F2.18 Pufferspeicher 5
4x11	SINT16	0	1.3.1	FLOAT16	READ	10	????	F3.01 VL-Solarsystem
4x12	SINT16	0	1.3.2	FLOAT16	READ	10	????	F3.02 RL-Solarsystem
4x13	SINT16	0	1.4.1	FLOAT16	READ	10	????	F4.01 VL-Heizsystem
4x14	SINT16	0	1.4.2	FLOAT16	READ	10	????	F4.02 VL-Heizsystem
4x15	SINT16	0	1.4.3	FLOAT16	READ	10	????	F4.03 RL-Heizsystem
4x16	SINT16	0	1.4.4	FLOAT16	READ	10	????	F4.04 RL-Zirkulation
4x17	UINT16	0	10.3.5	BIT	READ	1	????	V3.01 Ventil unterer WT
4x18	UINT16	0	10.3.6	BIT	READ	1	????	V3.02 Ventil unterer WT
4x19	SINT32	0	9.3.4	UINT32	READ	0.001	????	Z3.01.01 WMZ RL-Solar Q
4x21	SINT32	0	9.3.6	UINT32	READ	0.001	????	Z3.01.02 WMZ RL-Solar V
4x23	SINT16	0	1.3.1	FLOAT16	READ	10	????	Z3.01.03 WMZ T-VL
4x24	SINT16	0	1.3.2	FLOAT16	READ	10	????	Z3.01.04 WMZ T-RL
4x25	SINT32	0	9.3.2	UINT32	READ	0.001	????	Z3.01.05 WMZ RL-Solar P
4x27	SINT32	0	9.3.5	UINT32	READ	0.001	????	Z3.01.06 WMZ RL-Solar dV
4x29	SINT32	0	9.4.29	UINT32	READ	0.001	????	Z4.01.01 WMZ RL-Heizsystem Q
4x31	SINT32	0	9.4.30	UINT32	READ	0.001	????	Z4.01.02 WMZ RL-Heizsystem V
4x33	SINT16	0	1.4.2	FLOAT16	READ	10	????	Z4.01.03 WMZ T-VL
4x34	SINT16	0	1.4.3	FLOAT16	READ	10	????	Z4.01.04 WMZ T-RL
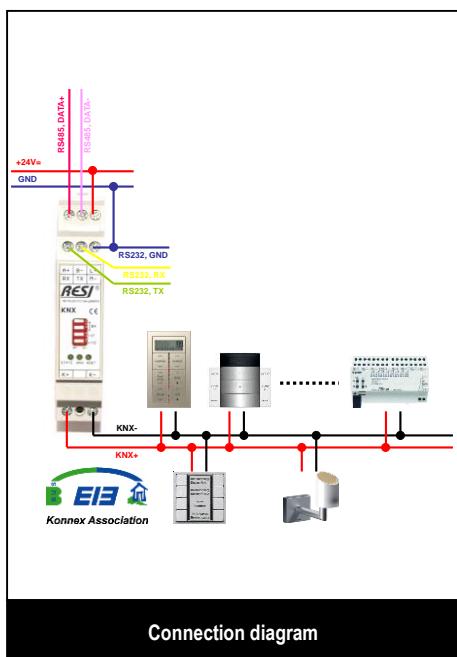
Connection diagram

DIP Switch

BR=Baud rate

DIP1	DIP2	Baud rate
OFF	OFF	9600Bd
ON	OFF	19200Bd
OFF	ON	38400Bd
ON	ON	57600Bd

IF=Interface
OFF   RS232
ON   RS485

FD=Function definition
OFF   The unit ID from the FLASH memory is used
ON   The unit ID 255 is used

DIP switches

AT A GLANCE

- ❑ Connects a host with a serial MODBUS/RTU or ASCII interface to a KNX network
- ❑ Mapping table between internal register and KNX groups
- ❑ Max. 300 mappings
- ❑ Host communication: via RS232 or RS485
- ❑ Host baud rates: 9600, 19200, 38400 or 57600Bd, no or even parity, 8 data bits, 1 stop bit
- ❑ galvanic insulation between KNX and RS232/RS485 interface
- ❑ supports all 32.767 KNX group addresses
- ❑ Power supply: 24V=
- ❑ Power consumption: <0.5W
- ❑ Mountable onto a EN50022 DIN rail

RESI®

... feel the spirit of a new generation