## GATEWAYS



it's all about perfection

STRIVE IN PERFECTION IN WHATEVER YOU DO TAKE THE BEST THAT EXISTS AND MAKE IT BETTER WHEN IT DOES NOT EXIST. DESIGN IT.

Sir Henry Royce

### CONTENT

In this catalog you will find all our product range for our gateways for MBUS, DALI, DMX, LED STRIPES, KNX, ENOCEAN, USB, SMART METER, POWER SUPPLIES, ...

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## M-BUS



it's all about perfection.

#### RESI-MBUSx-xxx

Our powerful gateways between M-BUS smart meter and MODBUS/RTU or MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

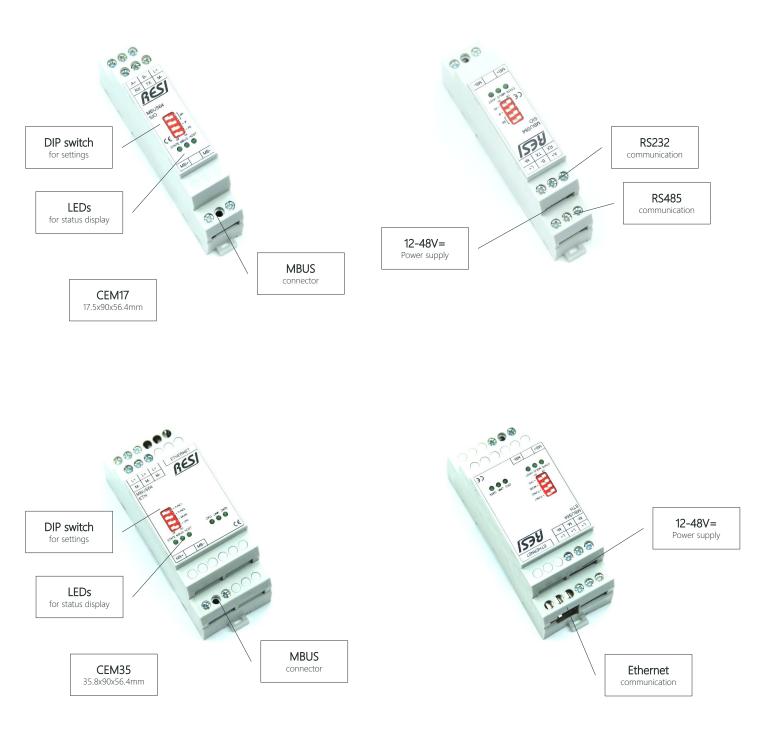


RESI-MBUS2-SIO	RS232 RS485	MBUS	2 Meter	<b>40</b> Registers	MODBUS/RTU Slave
RESI-MBUS8-SIO	RS232 RS485	MBUS	8 Meter	<b>400</b> Registers	MODBUS/RTU Slave
RESI-MBUS24-SIO	RS232 RS485	MBUS	24 Meter	<b>1000</b> Registers	MODBUS/RTU Slave
RESI-MBUS48-SIO	RS232 RS485	MBUS	48 Meter	1200 Registers	MODBUS/RTU Slave
RESI-MBUS64-SIO	RS232 RS485	MBUS	64 Meter	1200 Registers	MODBUS/RTU Slave
RESI-MBUS2-ETH	ETHERNET	MBUS	2 Meter	<b>40</b> Registers	MODBUS/TCP Server
RESI-MBUS8-ETH	ETHERNET	MBUS	8 Meter	400 Registers	MODBUS/TCP Server
RESI-MBUS24-ETH	ETHERNET	MBUS	24 Meter	1000 Registers	MODBUS/TCP Server
RESI-MBUS48-ETH	ETHERNET	MBUS	48 Meter	1200 Registers	MODBUS/TCP Server
RESI-MBUS64-ETH	ETHERNET	MBUS	64 Meter	<b>1200</b> Registers	MODBUS/TCP Server



#### RESI-MBUSx-xxx

Our powerful gateways between M-BUS smart meter and MODBUS/RTU or MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.





#### **RESI-MBUSx-SIO**

Our powerful gateways between M-BUS smart meter and MODBUS/RTU host with RS232 or RS485 interface. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.



HOST MODBUS/RTU MASTER	SMART METER Up to 64 smart meter connectable	M-BUS CABLE Up to 10km MBUS cable length	wired M-BUS connect all meters via cable	M-BUS supply build-in power supply for MBUS meter
RS232 RS485	Functionality         Serial Internal Internal MBUS protocol analysis & conversion.           Configurable mapping of MBUS values to         300256000 b			1xRS232 MODBUS/RTU slave protocol
IMBUS	Implicit data type conv	lding register. rersion between MBUS S holding registers	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave protocol
MBUS SMART METER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### **RESI-MBUSx-ETH**

Our powerful gateways between M-BUS smart meter and MODBUS/TCP host with Ethernet interface. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.



HOST MODBUS/TCP CLIENT	SMART METER Up to 64 smart meter connectable	M-BUS CABLE Up to 10km MBUS cable length	wired M-BUS connect all meters via cable	M-BUS supply build-in power supply for MBUS meter
ETHERNET	Internal MBUS protocol Configurable mappir	g of MBUS values to	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
MBUS	Implicit data type conv	lding register. ersion between MBUS S holding registers	MODBUS/TCP or MODBUS/RTU via Ethernet protocol	IP settings DHCP or static IPV4 settings
MBUS SMART METER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



#### RESI-MBUSx-LVL-xxx

Our powerful level converters between M-BUS smart meter and host with RS232 interface or Ethernet. Host must be capable to read-out and interpret smart meter data based on M-BUS protocol according to EN 1434 and EN 13757. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

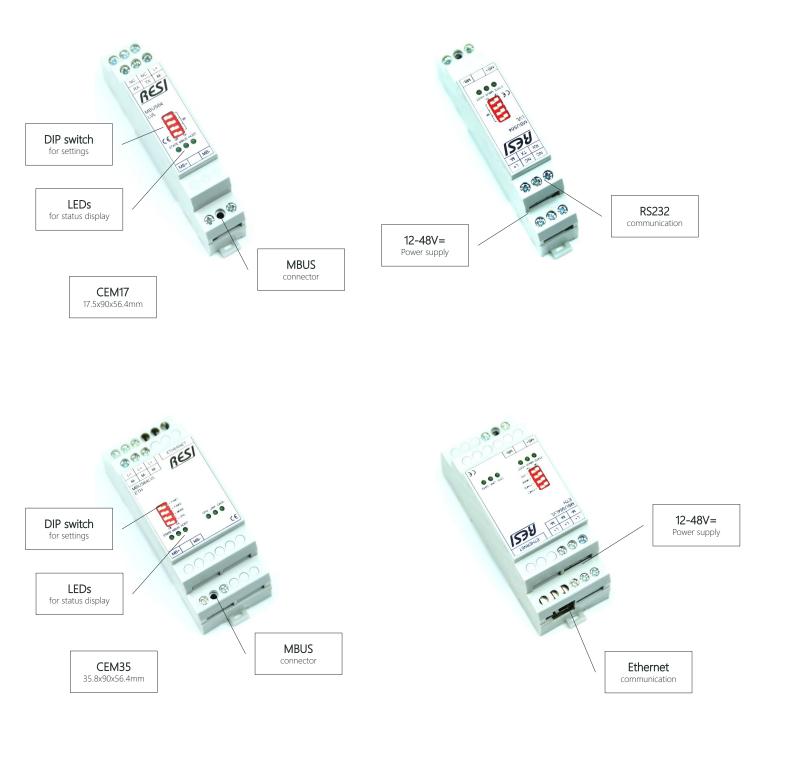


RESI-MBUS24-LVL	RS232	MBUS	24 Meter	M-BUS protocol
RESI-MBUS48-LVL	RS232	MBUS	48 Meter	M-BUS protocol
RESI-MBUS64-LVL	RS232	MBUS	64 Meter	M-BUS protocol
RESI-MBUS24LVL-ETH	ETHERNET	MBUS	24 Meter	M-BUS protocol
RESI-MBUS48LVL-ETH	ETHERNET	MBUS	48 Meter	M-BUS protocol
RESI-MBUS64LVL-ETH	ETHERNET	MBUS	64 Meter	M-BUS protocol



#### RESI-MBUSx-LVL-xxx

Our powerful level converters between M-BUS smart meter and host with RS232 interface or Ethernet. Host must be capable to read-out and interpret smart meter data based on M-BUS protocol according to EN 1434 and EN 13757. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.





#### **RESI-MBUSx-LVL**

Our powerful level converters between M-BUS smart meter and host with RS232 interface. Host must be capable to read-out and interpret smart meter data based on M-BUS protocol according to EN 1434 and EN 13757 via serial RS232 interface. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

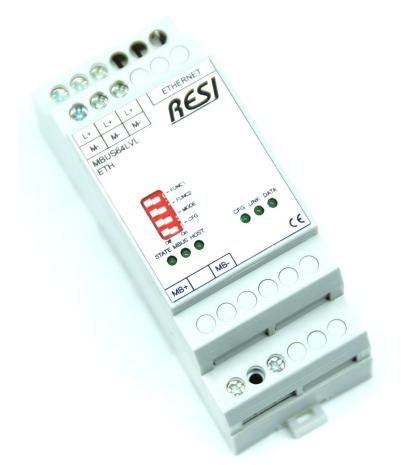


HOST MBUS PROTCOL	SMART METER Up to 64 smart meter connectable	M-BUS CABLE Up to 10km MBUS cable length	wired M-BUS connect all meters via cable	M-BUS supply build-in power supply for MBUS meter
RS232	Functionality Level converter between M-BUS and RS232 Read-out with M-BUS protocol on RS232	M-BUS interface RS232 300.57600 baud Even parity 8 data bits 1 stop bit selected by DIP switch	RS232 interface MBUS protocol 30057600 baud Even parity 8 data bits 1 stop bit selected by DIP switch	1xRS232 MBUS master protocol
MBUS SMART METER	Own software use your own software to read-out M-BUS	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### **RESI-MBUSxLVL-ETH**

Our powerful level converters between M-BUS smart meter and host with Ethernet interface. Host must be capable to read-out and interpret smart meter data based on M-BUS protocol according to EN 1434 and EN 13757 via plain Ethernet TCP/IP socket. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.



HOST MBUS SOCKET	SMART METER Up to 64 smart meter connectable	M-BUS CABLE Up to 10km MBUS cable length	wired M-BUS connect all meters via cable	M-BUS supply build-in power supply for MBUS meter
ETHERNET	Functionality Level converter between M-BUS and Ethernet	M-BUS interface Ethernet 30057600 baud Even parity	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
MBUS	Read-out with M-BUS protocol via Socket	8 data bits 1 stop bit selected by SW setup	M-BUS protocol via plain Ethernet TCP/IP socket	IP settings DHCP or static IPV4 settings
MBUS SMART METER	Own software use your own software to read-out M-BUS	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# M-BUS with RS232

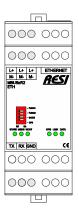


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#### RESI-MBUSxR2-xxx

Our powerful gateways between M-BUS smart meter and MODBUS/RTU or MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS232 interface or a RS232-MBUS level converter is installed. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.



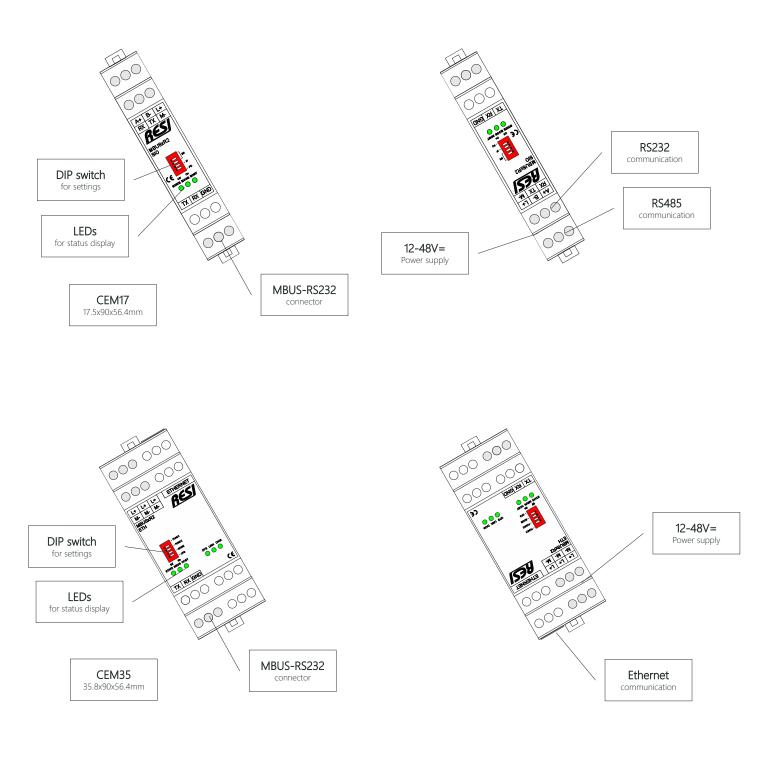


RESI-MBUS2R2-SIO	RS232 RS485	MBUS via RS232	2 Meter	<b>40</b> Registers	MODBUS/RTU Slave
RESI-MBUS8R2-SIO	RS232 RS485	MBUS via RS232	8 Meter	<b>400</b> Registers	MODBUS/RTU Slave
RESI-MBUS24R2-SIO	RS232 RS485	MBUS via RS232	24 Meter	<b>1000</b> Registers	MODBUS/RTU Slave
RESI-MBUS48R2-SIO	RS232 RS485	MBUS via RS232	48 Meter	1200 Registers	MODBUS/RTU Slave
RESI-MBUS64R2-SIO	RS232 RS485	MBUS via RS232	64 Meter	1200 Registers	MODBUS/RTU Slave
RESI-MBUS2R2-ETH	ETHERNET	MBUS via RS232	2 Meter	<b>40</b> Registers	MODBUS/TCP Server
RESI-MBUS8R2-ETH	ETHERNET	MBUS via RS232	8 Meter	400 Registers	MODBUS/TCP Server
RESI-MBUS24R2-ETH	ETHERNET	MBUS via RS232	24 Meter	<b>1000</b> Registers	MODBUS/TCP Server
RESI-MBUS48R2-ETH	ETHERNET	MBUS via RS232	48 Meter	1200 Registers	MODBUS/TCP Server
		MBUS	64	1200	MODBUS/TCP



#### RESI-MBUSxR2-xxx

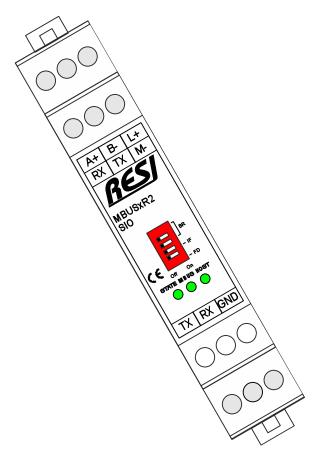
Our powerful gateways between M-BUS smart meter and MODBUS/RTU or MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS232 interface or a RS232-MBUS level converter is installed. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.





#### RESI-MBUSxR2-SIO

Our powerful gateways between M-BUS smart meter and MODBUS/RTU host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS232 interface or a RS232-MBUS level converter is installed. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

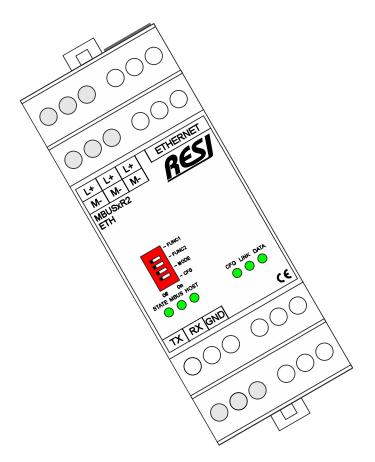


HOST MODBUS/RTU MASTER	SMART METER Up to 64 smart meter connectable	M-BUS interface use RS232 to connect to M-BUS network	RS232↔M-BUS connect to existing MBUS level converter	wired M-BUS connect all meters via cable
RS232 RS485	Internal MBUS protoco Configurable mappir	ng of MBUS values to	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave protocol
RS232	Implicit data type conv	lding register. rersion between MBUS S holding registers	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave protocol
MBUS SMART METER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### RESI-MBUSxR2-ETH

Our powerful gateways between M-BUS smart meter and MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS232 interface or a RS232-MBUS level converter is installed. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.



HOST MODBUS/TCP CLIENT	SMART METER Up to 64 smart meter connectable	M-BUS interface use RS232 to connect to M-BUS network	RS232↔M-BUS connect to existing MBUS level converter	wired M-BUS connect all meters via cable
ETHERNET	Internal MBUS protoco Configurable mappir	Functionality Internal MBUS protocol analysis & conversion. Configurable mapping of MBUS values to		1xETHERNET 10/100MBit RJ45
RS232	Implicit data type conv	lding register. rersion between MBUS S holding registers	MODBUS/TCP or MODBUS/RTU via Ethernet protocol	IP settings DHCP or static IPV4 settings
MBUS SMART METER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



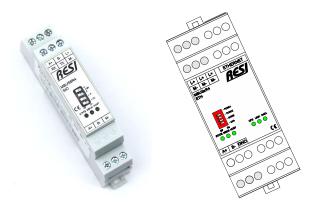
# M-BUS with RS485



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#### RESI-MBUSxR4-xxx

Our powerful gateways between M-BUS smart meter and MODBUS/RTU or MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS485 interface for networking with M-BUS protocol. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

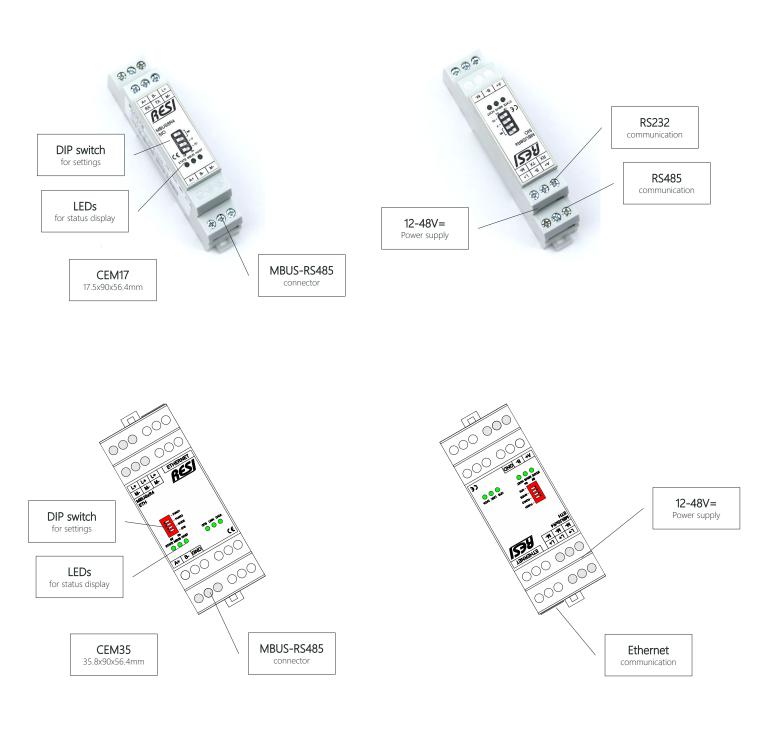


RESI-MBUS2R4-SIO	RS232 RS485	MBUS via RS485	2 Meter	<b>40</b> Registers	MODBUS/RTU Slave
RESI-MBUS8R4-SIO	RS232 RS485	MBUS via RS485	8 Meter	<b>400</b> Registers	MODBUS/RTU Slave
RESI-MBUS24R4-SIO	RS232 RS485	MBUS via RS485	24 Meter	<b>1000</b> Registers	MODBUS/RTU Slave
RESI-MBUS48R4-SIO	RS232 RS485	MBUS via RS485	48 Meter	1200 Registers	MODBUS/RTU Slave
RESI-MBUS64R4-SIO	RS232 RS485	MBUS via RS485	64 Meter	1200 Registers	MODBUS/RTU Slave
RESI-MBUS2R4-ETH	ETHERNET	MBUS <sub>via</sub> RS485	2 Meter	40 Registers	MODBUS/TCP Server
RESI-MBUS8R4-ETH	ETHERNET	MBUS <sub>via</sub> RS485	8 Meter	<b>400</b> Registers	MODBUS/TCP Server
RESI-MBUS24R4-ETH	ETHERNET	MBUS <sub>via</sub> RS485	24 Meter	<b>1000</b> Registers	MODBUS/TCP Server
RESI-MBUS48R4-ETH	ETHERNET	MBUS <sub>via</sub> RS485	48 Meter	1200 Registers	MODBUS/TCP Server
RESI-MBUS64R4-ETH	ETHERNET	MBUS via RS485	64 Meter	1200 Registers	MODBUS/TCP Server



#### RESI-MBUSxR4-xxx

Our powerful gateways between M-BUS smart meter and MODBUS/RTU or MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS485 interface for networking with M-BUS protocol. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.





#### RESI-MBUSxR4-SIO

Our powerful gateways between M-BUS smart meter and MODBUS/RTU host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS485 interface for networking with M-BUS protocol. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

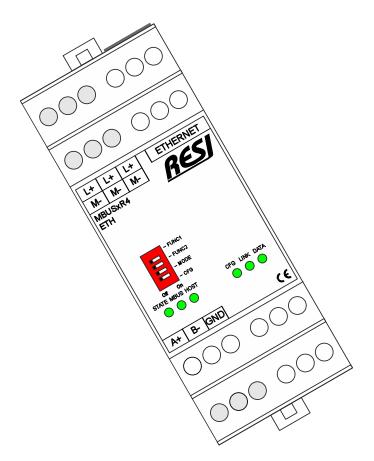


HOST MODBUS/RTU MASTER	SMART METER Up to 64 smart meter connectable	M-BUS interface use RS485 to connect to M-BUS network	RS485↔M-BUS connect to existing MBUS level converter	wired M-BUS connect all meters via cable
RS232 RS485	Internal MBUS protoco Configurable mappir	ng of MBUS values to	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave protocol
RS485	Implicit data type conv	lding register. rersion between MBUS S holding registers	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave protocol
MBUS SMART METER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### RESI-MBUSxR4-ETH

Our powerful gateways between M-BUS smart meter and MODBUS/TCP host. Read-out of smart meter data with M-BUS protocol according to EN 1434 and EN 13757. Smart meter must offer a RS485 interface for networking with M-BUS protocol. Connect water, heat, cold, gas or electricity meters with wired M-BUS interface via cable.

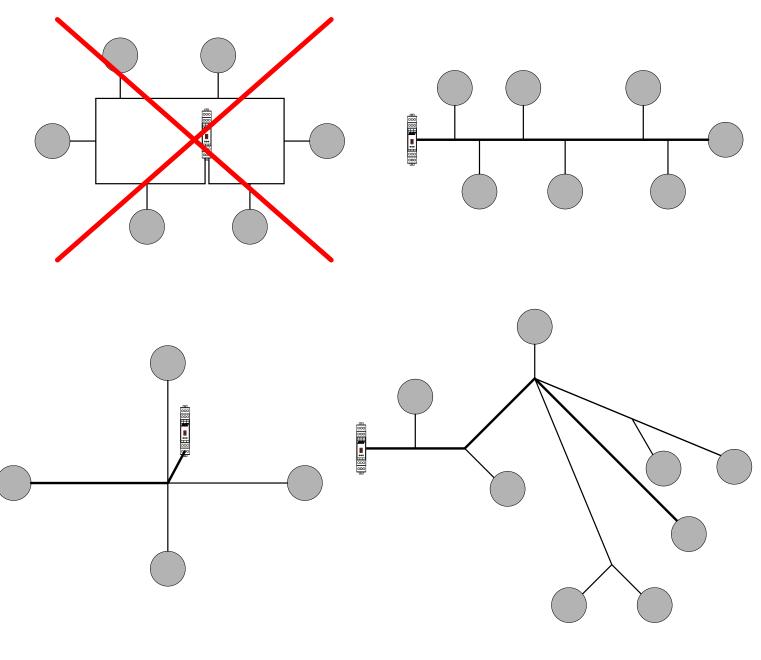


HOST MODBUS/TCP CLIENT	SMART METER Up to 64 smart meter connectable	M-BUS interface use RS485 to connect to M-BUS network	RS485↔M-BUS connect to existing MBUS level converter	wired M-BUS connect all meters via cable
ETHERNET	Internal MBUS protoco Configurable mappir	ng of MBUS values to	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
RESJ RS485	Implicit data type conv	lding register. rersion between MBUS S holding registers	MODBUS/TCP or MODBUS/RTU via Ethernet protocol	IP settings DHCP or static IPV4 settings
MBUS SMART METER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



## M-BUS cable topology

The M-BUS allows any kind of cable topology like line, star or tree. Only a ring topology is forbidden! Maximum cable length is 10km depending on the following parameters: type of cable, communication speed, maximum number of connected meters!





### MODBUSConfigurator

REST's MODBUS Configurator VI.10.3.1 - [Unnam	ied]					
	Local COM port settings					
		Device: COM8     Stopbits 1 stopbit     IP-Address				
		Parity: NONE     Port:				
	Device specific					
New Project     Arrow Reshmbus64-SIO - [RESHmbus6	RESHMBUS64-SIO	Test connection Test MBUS to MODBUS/RTU converter for	4 maters (1200 registers)			
Meter 20716229_2C2D_1D_16	Software version: 5.0.0		(The end (The end of the end of t			
	State:	no error				
	Search M-Bus slaves Search MODBUS	M-Bus slaves via serial Save CSV file Erase configuration Application Re	set Agtivate LEVEL converter De	eactivate LEVEL converter		
	Address: 255 💌 Pa	rarity: NONE 🔹 Start 7 Baudrate: 2400 💌				
	Baudrate: 57600 - Sto	topbits: 1 stopbit  End 251 Query timeout 65535	Poll timeout 65535			
	MB Register MBUS datatyp 4x00001 INT32[4]	pe MB datatype Content FLOAT32 Volume 10^-3 m <sup>4</sup>	MBUS index	MB value HEX MSW/0000.0000 LSW	Current MB value Meter name 0.0000.0.0000000000000000000000000000	2C2D 1D 16 (S)
	4x00003 INT32[4] 4x00005 INT32[4]	FLOAT32 Volume:10^-3 m®-Accumulation of abs value only if n UINT32 On time:hours	egative contribut		0.0000,0.000000000000E+0 Meter 20716229_ 4362,0x0000110A Meter 20716229_	
	4x00007 INT16[2] 4x00009 INT8[1]	FLOAT32 Volume flow:10^-3 m³/h FLOAT32 External temperature:10^0 °C	3 4	MSW:0000,0000:LSW	0.0000.0.000000000000E+0 Meter 20716229 28.0000.2.8000000000000E+1 Meter 20716229_	2C2D_1D_16 [S:
	4x00011 INT16[2] 4x00013 INT16[2]	FLOAT32 Volume flow:10*-3 m*/h FLOAT32 Volume flow:10*-3 m*/h	5	MSW:0000,0000:LSW	0.0000,0.00000000000000000000000000000	2C2D_1D_16 [S:
	4x00015 INT8[1]	FLOAT32 External temperature:10^0 °C	7	MSW:41A8,0000:LSW	21.0000,2.100000000000E+1 Meter 20716229_	2C2D_1D_16 [S:
	4x00017 INT8[1] 4x00019 INT8[1]	FLOAT32 External temperature:10^0 °C FLOAT32 External temperature:10^0 °C-Average media tempe		MSW:41C0,0000:LSW	30.0000,3.000000000000E+1 Meter 20716229_ 24.0000,2.4000000000000E+1 Meter 20716229_	2C2D_1D_16 [S:
	4x00021 INT32[4] 4x00023 INT32[4]	DATE_TIME_1Time&Date data type F FLOAT32 Volume:10^-3 m*[U:0,T:0,S:1]	10 11	MSW:0000,0000:LSW	16:52 D.M.Y:08.04.20 ST:0 IV:0,0x24883034 Meter 20716229_ 0.0000,0.000000000000E+0 Meter 20716229_	2C2D_1D_16 [S:
	4x00025 INT16[2] 4x00027 INT16[2]	FLOAT32 Volume flow:10^-3 m <sup>9</sup> /h[U:0,T:0,S:1] FLOAT32 Volume flow:10^-3 m <sup>9</sup> /h[U:0,T:0,S:1]	12	MSW:0000,0000:LSW	0.0000,0.000000000000E+0 Meter 20716229_ 0.0000,0.000000000000E+0 Meter 20716229_	2C2D_1D_16 [S:
	4x00029 INT8[1] 4x00031 INT8[1]	FLOAT32 External temperature:10^0 *C[U:0,T:0,S:1] FLOAT32 External temperature:10^0 *C[U:0,T:0,S:1]	14		15.0000,1.5000000000000E+1 Meter 20716229_ 25.0000,2.500000000000E+1 Meter 20716229_	
	4x00033 INT8[1] 4x00035 INT16[2]	FLOAT32 External temperature:10 <sup>o</sup> 0 "C-Average media tempe DATE_TYP_G Date data type G[U:0,T:0,S:1]	ature [U:0,T:0,\$16 17		22.0000,2.200000000000E+1 Meter 20716229_ D.M.Y:31.03.20,0x239F Meter 20716229_	2C2D_1D_16 [S:
	4x00036 INT16[2] 4x00037 INT48[6]	UINT16 Info code UINT64 Config number	18		1,0x0001 Meter 20716229_	2C2D_1D_16 [S:
	4x00041 INT16[2]	UINT16 Meter type	20	WORD:2203	8707,0x2203 Meter 20716229_	2C2D_1D_16 [S:
			21			
	4x09001 N/A 4x09002 N/A	UINT16 Converter state for meter UINT32R Identification number of meter	STATE ID	WORD:0003 LSW:6229,MSW:2071	3.0x0003 -> Values are valid!" Meter 20716229_ 544301609.0x20716229 Meter 20716229_	
	4x10001 N/A	UINT32 Identification number of meter	ID		544301609,0x20716229 Meter 20716229_	2C2D_1D_16 [S:
	4x10003 N/A 4x10005 N/A	UINT32->ASCI Manufacturer of meter UINT16 Version of meter	MANUFACTUREP VERSION		KAM Meter 20716229_ 29,0x001D Meter 20716229_	
	4x10006 N/A 4x10007 N/A	UINT16 Medium of meter UINT16 Access of meter	MEDIUM ACCESS		22,0x0016 -> Cold Water Meter 20716229_ 173,0x00AD Meter 20716229_	2C2D_1D_16 [S:
	4x10008 N/A 4x10009 N/A	UINT16 Status of meter UINT16 Future value of meter	STATUS FUTURE	WORD:0000	0,0x0000 Meter 20716229 0,0x0000 Meter 20716229	2C2D_1D_16 [S:
	4x10010 N/A	UINT16 Communcation state with meter	COMM STATE		3,0x0003 -> Values are valid! Meter 20716229_	
< >	Test mode star					
REST's MODBUS Configurator V1.10.3.1 - [Unnam						
	iedj					
	Common M-Bus slave setti	ings				
	Common M-Bus slave settin	d meter data				
	Common M-Bus slave settin Change primary address Read Slave name: M Addressing mode Pr	d meter data. Meter 14762517_4DEE_04_0D	adar efahue:			
	Common M-Bus slave settii Change primary address Read Slave name: M Addressing mode C Primary address © Secondary address	d meter data Meter 14762517_4DEE_04_0D Primary meter address: 253 ▼ Current m Secondary meter address (hex): 14762517 4DEE 04 0D No error	eter status:			
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave settin Change primory address Read Slave name: M C Primary address C Secondary address M	d meter data Meter 14762517_4DEE_04_0D	eter stetus:			
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub>	Common M-Bus slave settin Change primory address Read Slave name: M C Primary address C Secondary address M	d meter data Meter 14762517_4DEE_04_0D Primary meter address: 253 ▼ Current m Secondary meter address (hex): 14762517 4DEE 04 0D No error	eter status:			
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Qhange primary address Bead Slave name: Addressing mode Primary address Secondary address M M Poll pre delay 1: [5535 Poll pre delay 2: [5535	d meter data Meter 14762517_4DEE_04_0D Trimary meter address: 253 14762517_4DEE 04 0D No error Merufacturer name: SON	eter status:			
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus stave settir Change primary address Bead Stave name: M Addressing mode C Primary address G Secondary address M Poll pre delay 1: (5535	d meter data Meter 14762517_4DEE_04_0D Trimary meter address: Secondary meter address (hax): 14762517_4DEE_04_0D No error Weter status: 0.0.000 Adem/dschure name: SON Poll repeats 1: 55535	eter status:			
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode C Primary address So So So Poll pre delay 1: (65535 Poll pre delay 1: (65535 Poll post delay 1: (65535	d meter data Meter 14762517_4DEE_04_0D Trimary meter address: Secondary meter address (hax): 14762517_4DEE_04_0D No error Weter status: 0.0.000 Adem/dschure name: SON Poll repeats 1: 55535	eter status:			
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode C Primary address G Secondary address M Poll pre delay 1: [65535 Poll pre delay 2: [65535 Poll pre delay 2: [65535 Poll post delay 1: [65535 Poll post delay 2: [65536 Datapoint Add datapoint Delete datapoint	d meter data Meter 14762517_4DEE_04_0D Primary meter address: 253 ▼ Ourrent m Secondary meter address (hav): 14762517_4DEE_04_0D No error Veter status: 0.0x00 Aenufacturer name: SON Poli repeats 1: 65535 Poli repeats 2: 65535 Poli repeats 2: 65535 Poli repeats 2: 65535 Poli repeats 2: 65535				
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode C Primary address G Secondary address M Poll pre delay 1: [65535 Poll pre delay 2: [65535 Poll pre delay 2: [65535 Poll post delay 1: [65535 Poll post delay 2: [65536 Datapoint Add datapoint Delete datapoint	d meter data Meter 14762517_4DEE_04_0D Primary meter address: 253  Current m Secondary meter address (hex): 14762517 4DEE (04_00) No error Meter status: 0.0.040 Menufacturer neme: SON Poll repeats 1: 65535 Poll repeats 2:	MBUS data MBUS size	MBUS exponent MB expor	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode Pimary address Poll prot delay 1: Poll prot delay 1: Poll post delay 2: Poll post delay 3: Poll post delay 3: Poll post delay 3: Poll post delay 4: Poll	d meter data Meter 14762517_dDE_04_0D Primary meter address: 253 ↓ Current m Secondary meter address (hex): 14762517 4DEE (04 00) No error Meter status: 0.0.000 Menufacturer neme: SON Poll repeats 1: 5535 Poll repeats 2: 5535 Poll repeat	MBUS data MBUS size 1-2 4 4		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Steve name: Addressing mode Primary address Gescondary address M M Poll pre delay 1: [5535 Poll post delay 1: [5535 Poll post delay 1: [5535 Poll post delay 1: [5535 Poll post delay 1: [5535 Datapoints Add detapoint Delete detapoint Intra 2: [Liox 2: Intra 2: [Liox 2: Intra 2: [Liox 2: Intra 2: [Liox 2: Intra 2: [Liox	d meter data Meter 14762517_4DEE_04_0D Primary meter address: 253  Current m Secondary meter address (hex): 14762517 40EE (04 00) No error Meter status: 0.0.040 Menufacturer neme: SON Poll repeats 1: 65535 Poll repeats 2: 700 No Poll repeats 2:	MBUS data MBUS size 1-2 4 1-1-4 4 1-14 3 1-19 4	3 0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode Primary address Secondary address M Poll pre delay 1: [5535 Poll post delay 1: [5535 Poll post delay 1: [5535 Poll post delay 2: [5535 Datapoints Add detapoint Delete detapoint Intra 2: FLOA 2: INT24 UINT3 4: INT32: FLOA 3: BCC06 SINT3 4: INT32: FLOA	d meter data Meter 14762517_dDEE_04_0D Primary meter address: 253  Current m Secondary meter address (hax): 14762517 ADEE (04 00) No error Meter status: 0.0.000 Menufacturer neme: SON Poll repeats 1: 65535 Poll repeats 2:	MBUS data MBUS size 1-2 4 1-8 4 1-14 3 1-19 4 1-25 4 1-31 4	3 0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode Primary address Secondary address Poll prot delay 1: [5535 Poll post delay 2: [5535 Poll post delay 2: [5535 Poll post delay 2: [5535 Datapoints Add detapoints Detapoints Add detapoint Delete detapoint INT32 UINT3 4: UINT32 FLOA 2: UINT24 UINT3 3: BCC08 SINT34 4: UINT32 FLOA 5: FLOAT32 FLOA 6: FLOAT32 FLOA	di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253  Current m Secondary meter address (hax): 14762517_0DEE (04_0D) No error Meter status: 0.0.000 Menufacturer neme: SON Poll repeats 1: 65355 Poll repeats 2: 65535 Poll repeats	MBUS data         MBUS size           1-2         4           1-8         4           1-19         4           1-19         4           1-25         4           1-31         4           1-37         4           1-43         4	3 0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti           Change primary address         Bead           Slave name:         M           Addressing mode         Pi           C Primary address         Pi           C Scondary address         Pi           C Scondary address         M           Poll pre delay 1:         55535           Poll pre delay 1:         55535           Datapoints         Belete datapoint           Intra 2:         LINT24           UINT32         FLOA           4         NT32         FLOA           5:         FLOAT32         FLOA           6:         FLOAT32         FLOA           7:         FLOAT32         FLOA           9:         FLOAT32         FLOA	di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253 ↓ Current m Secondary meter address (hax): 14762517_0DEE (04_0D) No error Meter status: 0.0x00 Menufacturer neme: SON Poll repeats 1: 5535 Poll repeats 2: 5535 Poll repe	MBUS dots         MBUS size           1-2         4           1-14         3           1-14         3           1-25         4           1-31         4           1-37         4           1-37         4           1-49         4	3 0 -2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave settil           Change primary address         Bead           Stave name:         M           Addressing mode         P           C Primary address         P           C Scondary address         M           Poll pre delay 1:         (5535           Poll pre delay 2:         (5535           Poll pre delay 2:         (5535           Poll post delay 1:         (5535           Poll post delay 1:         (5535           Poll post delay 1:         (5535           Datepoints         Bdd           Add datapoint         Delate datapoint           Intr32:         FLOA*           1:         INT32:         FLOA*           4:         INT32:         FLOA*           5:         FLOA*         PATE           6:         FLOA*         FLOA*           7:         FLOA*         FLOA*           9:         FLOA*         FLOA* </td <td>di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253 ↓ Current m Secondary meter address (hex): 14762517_dDEE (04_0D) No error Meter status: 0.0x00 Meter status: 0.0x00 No error Meter status: 0.0x00 No error 0.0x00 No error No error</td> <td>MBUS data         MBUS size           1-2         4           1-4         3           1-14         3           1-75         4           1-31         4           1-37         4           1-49         4           1-66         4           1-63         4           1-70         2</td> <td>3         0           -2         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0</td> <td>nent</td> <td></td>	di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253 ↓ Current m Secondary meter address (hex): 14762517_dDEE (04_0D) No error Meter status: 0.0x00 Meter status: 0.0x00 No error Meter status: 0.0x00 No error 0.0x00 No error No error	MBUS data         MBUS size           1-2         4           1-4         3           1-14         3           1-75         4           1-31         4           1-37         4           1-49         4           1-66         4           1-63         4           1-70         2	3         0           -2         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave name: Addressing mode Primary address Secondary address Poll prot delay 1: [5535 Poll prot delay 1: [5535 Poll prot delay 1: [5535 Poll post delay 2: [5535 Poll post delay 2: [5535 Datapoints Add datapoint Delete datapoint Intra 2: ELOA 2: UNT24 UINT32: ELOA 3: BCC4 SIINT32: ELOA 5: FLOAT32: FLOA 5: FLOAT32: FLOA 6: FLOAT32: FLOA 7: FLOAT32: FLOA 7: FLOAT32: FLOA 9: FLOAT32: FLOA 10: FLOAT32: FLOA 11: INT32: FLOA 10: FLOAT32: FLOA 10: FLOAT32: FLOA 11: INT32: FLOA 11: INT30: UINT3 11: INT6: UINT1 13: INT8: UINT1 14: INT8 14: INT8 15: INT8	di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253 ↓ ↓ Current m Secondary meter address (hax): 14762517_0DEE (04_0D) No error Meter status: 0.0x00 No error Meter status: 0.0x00 No error No error	MBUS data         MBUS size           1°C         4           1°P         2           1°P         1           1°P         1		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave settil           Change primary address         Bead           Sitzer ename:         M           Addressing mode         Pi           C Primary address         Pi           C Secondary address         M           Poll pre delay 1:         55535           Poll pre delay 1:         55535           Poll post delay 1:         65535           Poll post delay 2:         65535           Datapoints         Bede           Add detapoint         Delete detapoint           INT32         FLOA           1         INT32         FLOA           2         INT24         UINT3           1         INT32         FLOA           2         INT24         LINT34           1         INT32         FLOA           3         BCC6         SINT34           1         INT32         FLOA           3         BCC8         SINT34           1         INT32         FLOA           4         INT32         FLOA           9         FLOAT32         FLOA           9         FLOAT32         FLOA           11         INT6         UINT	di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253 ↓ Unrent m Secondary meter address (hax): 14762517 4DEE (04 00) No error Meter status: 0.0x00 Meter status: 0.0x00 No error Meter status: 0.0x00 No error 0.0x00 No error 0.0x000 No error 0.0x000 No error 0.0x000 No error 0.0x000 No error 0.0x000 No error 0.0x000 No error 0.0x000 No error 0.0x0000 No error 0.0x0000 No error 0.0x0000 No error 0.0x00000 No error 0.0x00000 No error 0.0x00000 No error 0.0x00000 No error 0.0x000000 No error 0.0x0000000000000000000000000000000000	MBUS data         MBUS size           1°C         4           1°B         4           1°H         3           1°H         4           1°S         4           1°S         4           1°S         4           1°A         1           1°A         1           1°A         1           1°A         1           1°A         1		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave settil           Change primary address         Bead           Sitzer ename:         M           Addressing mode         Pi           C Primary address         Pi           C Primary address         Pi           C Secondary address         M           Poll pre delay 1:         65535           Poll pre delay 2:         65535           Poll post delay 2:         65535           Datapoints         Badd           Add detapoint         Delate detapoint           Intr32         FLOAT32           Pol Tors delay 1:         101732           Pol Post delay 2:         65535           Datapoints         Delate detapoint           Delate delay 2:         65535           Datapoints         Delate delay 2:           Contrast         FLOAT32           Poll Post delay 2:         FLOAT32           Poll Post delay 3:	d meter data Meter 14762517_dDEE_04_0D Primary meter address: 253  ↓ Current m Secondary meter address (hex): 14762517_dDEE 04_0D No error Meter status: 0.0.400 Meter status: 0.0.400 Meter status: 0.0.400 No error Meter status: 0.0.400 No error 0.0.400 No error 0.0.4000 0.0.40000 0.0.40000 0.0.40000 0.0.40000 0.0.40000 0.0.40000 0.0.40000 0.0.40000 0.0.400000 0.0.400000 0.0.400000 0.0.4000000 0.0.400000 0.0.4000000 0.0.4000000 0.0.4000000 0.0.40000000 0.0.4000000000	MBUS data         MBUS size           1-2         4           1-6         4           1-13         4           1-31         4           1-32         4           1-33         4           1-49         4           1-68         4           1-63         4           1-77         1           1-83         4           1-74         1           1-85         1           1-86         1           1-81         1           1-85         1           1-89         2		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave settil           Change primary address         Bead           Sitzer ename:         M           Addressing mode         Pi           C Primary address         Pi           C Secondary address         M           Poll pre delay 1:         55535           Poll pre delay 1:         55535           Poll pre delay 2:         65535           Poll post delay 2:         65535           Datapoints         Badd           Add detapoint         Delete detapoint           Intr32:         FLOA           2:         INT32:           1:         INT32:           4:         INT32:           4:         INT32:           4:         INT32:           7:         FLOAT32:           6:         FLOAT32:           7:         FLOAT32:           9:         FLOAT32:           10:         FLOAT32:           9:         FLOAT32:           10:         FLOAT32:           11:         NT16:           11:         NT18:           11:         NT18:           11:         NT18:           11:         INT16	di meter data Meter 14762517_dDEE_04_0D Primary meter address: 253 valuer 14762517_dDEE 04_0D No error Meter status: 0.0.000 Meter status: 0.0.0000 Meter status: 0.0.0000 Meter status: 0.0.0000 Meter status: 0.0.0000 Meter status: 0.0.0000 Meter status: 0.0.0000 Meter stat	MBUS data         MBUS size           1-2         4           1-14         4           1-15         4           1-13         4           1-37         4           1-37         4           1-43         4           1-65         4           1-83         4           1-77         1           1-83         4           1-77         1           1-83         4           1-77         1           1-85         1           1-85         1           1-81         1           1-85         15           1-13         4		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slove sotiil Change primary address Eead Slove norme: Addressing mode Primary address Secondary address M Poll pre delay 1: 65535 Poll pre delay 2: 65535 Poll pre delay 2: 65535 Poll post delay 2: 65535 Poll post delay 2: 65535 Datapoints Add detapoint Index MBUS datay. MB de 0 INT32 UNIT 1 INT32 FLOAT 2 FLOAT32 FLOAT 3 FLOAT32 FLOAT 4 FLOAT32 FLOAT 5 FLOAT32 FLOAT 5 FLOAT32 FLOAT 1 INT32 SATT 1 INT32 SATT 4 FLOAT32 FLOAT 5 FLOAT32 FLOAT 5 FLOAT32 FLOAT 1 INT32 SATT 1 INT32 SATT 5 FLOAT32 FLOAT 1 INT32 SATT 1 INT3 UNITT 1 INT3 UNITT 2 INT32 UNITT 1 INT3 UNITT 2 INT32 UNITT 1 INT32 UNITT 2 INT32 UNITT 3 INT8 UNIT 3 INT8 UNITT 3 INT8 UNITT 3 INT8 UNITT 3 INT	d meter data Meter 14752517_4DEE_04_0D Primary meter address (he): 4452517_4DEE_04_0D Verent meter address (he): 4452517_4DEE_04_0D Verent meter address (he): 4452517_4DEE_04_0D Verent meter address (he): 4452517_4DEE_04_0D Verent meter address (he): 45535 Poll repeats 1: 45535 Poll repeats 2: 45535 Poll repeats 2: 45535	MBUS data         MBUS size           1-2         4           1-6         4           1-11         3           1-125         4           1-25         4           1-26         4           1-77         4           1-37         4           1-65         4           1-65         4           1-67         4           1-77         1           1-85         4           1-65         4           1-65         4           1-65         1           1-85         1           1-85         1           1-77         1           1-81         1           1-85         1           1-85         15           1-13         4           1-128         4		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave norme: Addressing mode C Primary address Secondary address M Poll pre delay 1: 65535 Poll post delay 1: 65535 Poll post delay 1: 65535 Poll post delay 2: 655	d meter data Meter 1472517_4DEE_04_0D Primary meter address (he): 14725217_4DEE_04_0D Verent meter address (he): 147252535 Poll repeats 1: 155355 Poll repeats 2: 15535 Poll repeats 2:	MBUS data         MBUS size           1-2         4           1-1         4           1-1         4           1-1         4           1-1         4           1-3         4           1-31         4           1-37         4           1-43         4           1-65         4           1-8         4           1-77         1           1-8         4           1-77         1           1-85         4           1-80         2           1-77         1           1-81         1           1-98         2           1-98         15           1-121         4           1-122         4           1-128         4           1-132         4           1-133         4           1-135         4           1-132         4		nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave norms: Addressing mode C Primary address Secondary address M Poll pre delay 1: 65535 Poll post delay 1: 65535 Poll post delay 2: 655	d meter data Meter 1472517_4DEE_04_0D Primary meter address (he): 14725217_4DEE_04_0D Veter strue: 0.000 Meter 44752517_4DEE_04_0D Veter strue: 0.000 Poll repeats 1: 65535 Poll repeats 2: 0.05535 Poll repeats 2: 0.05535 Poll repeats 2: 0.05535 Poll repeats 2: 0.05535 Poll repeats 2: 0.05737 Poll repeats 2:	MBUS data         MBUS size           1-2         4           1-6         4           1-7         4           1-14         3           1-15         4           1-25         4           1-37         4           1-37         4           1-43         4           1-65         4           1-65         4           1-77         4           1-77         1           1-85         4           1-65         4           1-65         4           1-77         1           1-81         1           1-85         1           1-85         15           1-13         4           1-128         4           1-129         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           1-129         4           1-133 <t< td=""><td>3         0           -2         0           0         0           -2         0           -3         0</td><td>nent</td><td></td></t<>	3         0           -2         0           0         0           -2         0           -3         0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Bead Slave norms: Addressing mode C Primary address Secondary address M Poll pre delay 1: 65535 Poll post delay 1: 65535 Poll post delay 1: 65535 Poll post delay 2: 655	d meter data Meter 1472517_4DEE_04_0D Primary meter address (he): 44752517_4DEE_04_0D Verent address (he): 44752517_4DEE_04_0D 4475255555 44752 447525555 44752 447525555 447525555 447525555 447525555 4475255555 4475255555 44755555 447555555 447555555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 44755555 447555555 44755555 44755555 44755555 44755555 44755555 44755555 447555555 44755555 447555555 447555555 447555555 447555555 447555555 447555555 447555555 447555555 447555555 447555555 447555555 4475555555 447555555 4475555555 44755555555 44755555555 447555555555 4475555555555	MBUS data         MBUS size           1-2         4           1-6         4           1-7         4           1-25         4           1-25         4           1-37         4           1-37         4           1-37         4           1-43         4           1-55         4           1-65         4           1-77         4           1-85         4           1-65         4           1-65         4           1-77         1           1-85         4           1-65         4           1-77         1           1-85         1           1-74         1           1-85         1           1-85         1           1-85         15           1-12         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           2-10         4 </td <td>3         0           -2         0           0         0           -2         0           -3         0</td> <td>nent</td> <td></td>	3         0           -2         0           0         0           -2         0           -3         0	nent	
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti Change primary address Eead Slave norms: Addressing mode C Primary address G Secondary address M Poll pre delay 1: 65535 Poll pre delay 2:	d meter data Meter 1472517_4DEE_04_0D Primary meter address (ho: 1 4725217_4DEE_04_0D Verent meter address (ho: 1 4725217_4DEE_04_0D Verent meter address (ho: 1 4725217_4DEE_04_0D Verent meter address (ho: 1 4725217_4DEE_04_0D Verent meter address (ho: 1 4725257_4DEE_04_0D Verent meter address (ho: 1 47257_4DEE_04_0D Verent meter address (ho: 1 47257_4DEE_04_0D Verent meter address (ho: 1 47257_4DEE_04_0D Verent meter address (ho: 1 47257_4DEE_04_0D Verent meter address (ho: 1 47257_4DEE_04_0D 4	MBUS data         MBUS size           1-2         4           1-8         4           1-14         3           1-12         4           1-27         4           1-37         4           1-37         4           1-49         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-774         1           1-85         1           1-85         1           1-89         2           1-121         4           1-123         4           1-128         4           1-128         4           1-128         4           1-128         4           1-128         4           2-10         4           2-17         4           2-10         4           2-17         4           2-10         4<	3         0           -2         0           0         0           10         0           10         0           10         0           10         0           10         0           10         0           10         0		Easy setup
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub> ⊡	Common M-Bus slave setti Change primary address Eead Slave norms: Addressing mode C Primary address Secondary address M Poll pre delay 1: 65535 Poll pre delay 2: 6	d meter data Meter 1472517_4DEE_04_0D Primary meter address (hs:) 1472517_4DEE 04_0D Verent masses decondary meter address (hs:) 1472517_4DEE 04_0D No error Meter status: 0.000 Poll repeats 1: 05535 Poll repeats 2: 05535 Poll repeats 2: 05555 Poll repeats 2: 05555 Poll repeats 2: 05557 Poll repeats 2: 05557 Poll repea	MBUS data         MBUS size           1-2         4           1-8         3           1-14         3           1-25         4           1-27         4           1-37         4           1-37         4           1-49         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-774         1           1-8         1           1-99         2           1-724         1           1-85         1           1-99         2           1-121         4           1-122         4           1-123         4           1-124         4           1-125         4           1-128         4           2-10         4           2-17         4           2-17         4           2-17         4           2-17         4 </td <td>3         0           -2         0           0         0           10         0           10         0           10         0           10         0           10         0           10         0           10         0</td> <td>Simple test Test read-out &amp; display</td> <td>Easy setup auto search for</td>	3         0           -2         0           0         0           10         0           10         0           10         0           10         0           10         0           10         0           10         0	Simple test Test read-out & display	Easy setup auto search for
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub> ⊡	Common M-Bus slave setti Change primary address Eead Slave norms: Addressing mode C Primary address Secondary address M Poll pre delay 1: 65535 Poll pre delay 2: 6	d meter data Meter 1472517_4DEE_04_0D Primary meter address (hs:) 4472517_4DEE_04_0D Verent masses Aerufacturer name: 80N Poll repeats 1: 65535 Poll repeats 2: 55535 Poll repeats 2: 555	MBUS data         MBUS size           1-2         4           1-8         4           1-14         3           1-25         4           1-26         4           1-14         3           1-25         4           1-37         4           1-37         4           1-49         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-63         4           1-74         1           1-85         1           1-85         1           1-85         1           1-85         1           1-121         4           1-122         4           1-123         4           2-10         4           2-17         4           2-20         4           2-210         4	3         0           -2         0           0         0           10         0           10         0           10         0           10         0           10         0           10         0           10         0	Simple test	Easy setup
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slove sotiil Change primary address Eerod Slove norme: Addressing mode Primary address Secondary address Poll pre delay 1: 65535 Poll pre delay 1: 65535 Poll pre delay 2: 65535 Poll post delay 2: 65535 P	d meter data Meter 14752517_4DEE 04_00 Primary meter address (no. 2 Secondary meter address (no. 2 Secondary meter address (no. 2 Meter status: 0.0.00 Meter status: 0.0.00 M	MBUS data         MBUS size           1-2         4           1-14         3           1-14         3           1-14         3           1-14         3           1-14         3           1-14         3           1-14         3           1-14         3           1-15         4           1-31         4           1-43         4           1-45         4           1-45         4           1-70         2           1-74         1           1-65         1           1-81         1           1-85         1           1-85         1           1-86         1           1-93         4           1-13         4           1-13         4           1-13         4           2-10         4           2-11         4           2-13         4           2-14         4           2-14         4           2-14         4           2-14         4           2-14         4		Simple test Test read-out & display of meter data	Easy setup auto search for connected meters
⊕ <sub>PRJ</sub> ⊖ <sub>PRJ</sub> ⊕ <sub>PRJ</sub>	Common M-Bus slave setti           Change primary address         Bead           Silzer ename:         M           Addressing mode         Pi           Addressing mode         Pi           Change primary address         M           Addressing mode         Pi           Secondary address         M           Poll pre delay 1:         65535           Poll pre delay 2:         65535           Poll post delay 2:         65535           Poll post delay 2:         65535           Datapoint         Add datapoint           Add datapoint         Delate           IntT32         UINT3           UNT32         PolA72           Pi CoAT32         PLOAT32           Pi CoAT32         PLOAT32           Pi PLOAT32         PLOAT32           Pi PLOAT32         PLOAT32           Pi PLOAT32         PLOAT32           PLOAT32         PLOAT32 <td< td=""><td>di meter data Meter 14752517_4DEE_04_0D Primary meter address (he): 253 Verent magneter address (he): 265 265 265 275 275 275 275 275 275 275 27</td><td>MBUS dots         MBUS size           1-2         4           1-2         4           1-14         3           1-14         3           1-14         3           1-14         3           1-15         4           1-37         4           1-37         4           1-43         4           1-66         4           1-77         1           1-78         1           1-79         2           1-74         1           1-74         1           1-74         1           1-81         1           1-81         1           1-83         4           1-12         4           1-13         4           1-12         4           1-12         4           1-12         4           1-12         4           1-12         4           1-12         4           2-21         4           2-21         4           2-21         4           2-24         4           2-245         4</td><td></td><td>Simple test Test read-out &amp; display</td><td>Easy setup auto search for</td></td<>	di meter data Meter 14752517_4DEE_04_0D Primary meter address (he): 253 Verent magneter address (he): 265 265 265 275 275 275 275 275 275 275 27	MBUS dots         MBUS size           1-2         4           1-2         4           1-14         3           1-14         3           1-14         3           1-14         3           1-15         4           1-37         4           1-37         4           1-43         4           1-66         4           1-77         1           1-78         1           1-79         2           1-74         1           1-74         1           1-74         1           1-81         1           1-81         1           1-83         4           1-12         4           1-13         4           1-12         4           1-12         4           1-12         4           1-12         4           1-12         4           1-12         4           2-21         4           2-21         4           2-21         4           2-24         4           2-245         4		Simple test Test read-out & display	Easy setup auto search for







it's all about perfection.

#### **RESI-DALI-xxx**

Our powerful master gateways between DALI light bus and host. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Use our RESI-DALI-PS as power supply for your DALI light system. Or use our all-in-one solution RESI-DALI+PS-SIO or RESI-DALI+PS-ETH to communicate with your DALI bus system with only one unit.



RESI-DALI-SIO	DALI Master	RS232 RS485	NO integrated DALI power supply	DALI 1.0 DALI 2.0	<b>64</b> Ballasts	MODBUS/RTU Slave ASCII text protocol
RESI-DALI-ETH	DALI Master	ETHERNET	NO integrated DALI power supply	DALI 1.0 DALI 2.0	64 Ballasts	MODBUS/TCP Server ASCII text socket
RESI-DALI-PS	DALI Power supply	12-48V= Power supply	DALI output current ≤200mA			



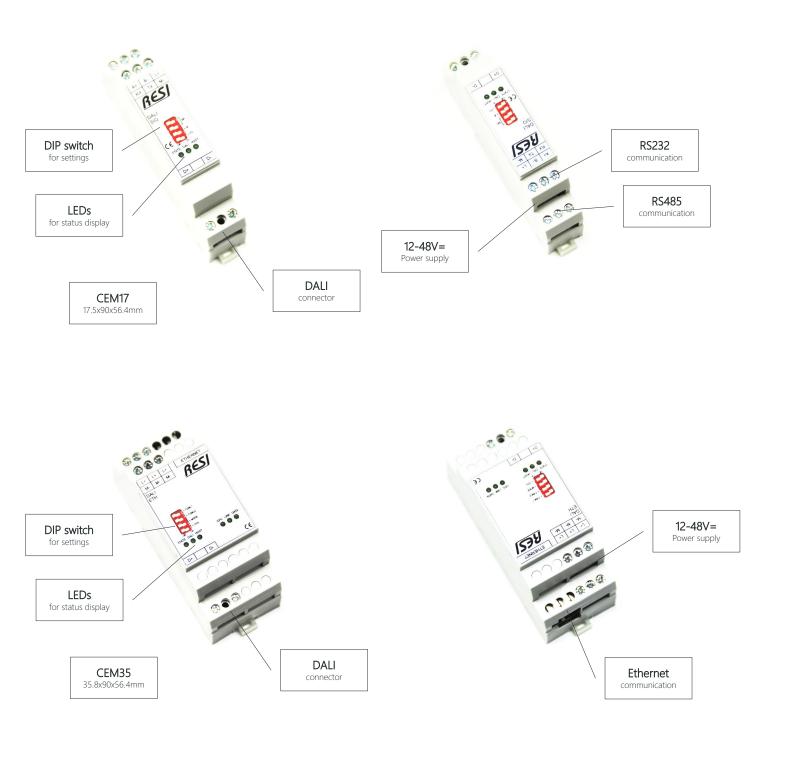


RESI-DALI+PS-SIO	DALI Master with integrated DALI power supply	RS485	Switchable DALI power supply ≤250mA	DALI 1.0 DALI 2.0	64 Ballasts	MODBUS/RTU Slave ASCII text protocol
RESI-DALI+PS-ETH	DALI Master with integrated DALI power supply	ETHERNET	Switchable DALI power supply ≤250mA	DALI 1.0 DALI 2.0	64 Ballasts	MODBUS/TCP Server ASCII text socket



#### **RESI-DALI-xxx**

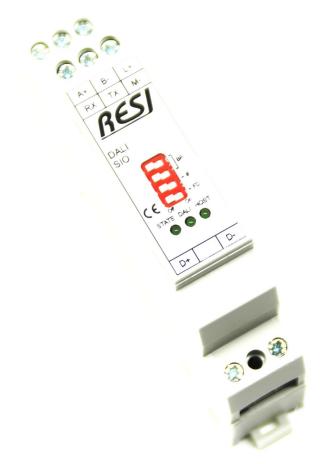
Our powerful master gateways between DALI light bus and host. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Use our RESI-DALI-PS as power supply for your DALI light system. Or use our all-in-one solution RESI-DALI+PS-SIO or RESI-DALI+PS-ETH to communicate with your DALI bus system with only one unit.





#### **RESI-DALI-SIO**

Our powerful master gateway between DALI light bus and host. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Configuration & test of DALI light system with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	DALI 1.0/2.0 Up to 64 ballasts or control gears	DALI CABLE Up to 300m DALI cable length	DALI BUS search & initialize & test a DALI network	external <b>DALI</b> power supply necessary
RS232 RS485	Functionality DALI 1.0/2.0 master gateway to control DALI 1.0 ballasts and to communicate with DALI 2.0 control gears. Supports all DALI 1.0/2.0 commands and DALI DT6 and DT8 commands. Special support of eDALI commands.		Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
DALI 1.0/2.0			No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### **RESI-DALI-ETH**

Our powerful master gateway between DALI light bus and host. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Configuration & test of DALI light system with our free software MODBUSConfigurator.



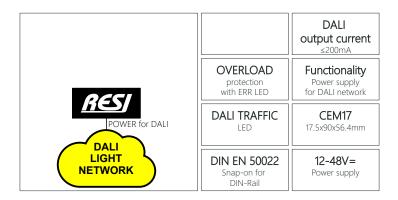
HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	DALI 1.0/2.0 Up to 64 ballasts or control gears	DALI CABLE Up to 300m DALI cable length	DALI BUS search & initialize & test a DALI network	external <b>DALI</b> power supply necessary
ETHERNET	Functionality DALI 1.0/2.0 master gateway to control DALI 1.0 ballasts and to communicate with DALI 2.0 control gears. Supports all DALI 1.0/2.0 commands and DALI DT6 and DT8 commands. Special support of eDALI commands.		Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
DALI 1.0/2.0			MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



#### **RESI-DALI-PS**

Our ultra slim DALI power supply with 200mA maximum output current on the DALI bus for connecting up to 64 DALI 1.0 ballasts or DALI 2.0 control gears. Primary power supply with 12-48Vdc.







#### RESI-DALI+PS-xxx

Our powerful master gateway between DALI light bus and host with integrated, switchable DALI power supply. Host protocols: MODBUS/RTU or MODBUS/TCP or ASCII text. Host communication via RS485 serial interface or via Ethernet. Integrated, switchable DALI power supply with max. 250mA DALI output current. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Configuration & test of DALI light system with our free software MODBUSCOnfigurator.





#### RESI-DALI+PS-SIO

Our powerful master gateway between DALI light bus and host with integrated, switchable DALI power supply. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS485 serial interface. Integrated, switchable DALI power supply with max. 250mA DALI output current. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Configuration & test of DALI light system with our free software MODBUSConfigurator.



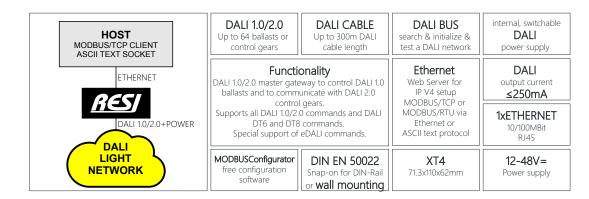
HOST MODBUS/RTU MASTER ASCII TEXT	DALI 1.0/2.0 Up to 64 ballasts or control gears	DALI CABLE Up to 300m DALI cable length	DALI BUS search & initialize & test a DALI network	internal, switchable DALI power supply
RS485	Functionality DALI 1.0/2.0 master gateway to control DALI 1.0 ballasts and to communicate with DALI 2.0 control gears. Supports all DALI 1.0/2.0 commands and DALI DT6 and DT8 commands. Special support of eDALI commands.		Serial Interface RS485 300256000 baud	DALI output current ≤250mA
DALI 1.0/2.0+POWER			No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
LIGHT	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail or wall mounting	<b>XT4</b> 71.3x110x62mm	12-48V= Power supply



#### RESI-DALI+PS-ETH

Our powerful master gateway between DALI light bus and host. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Integrated, switchable DALI power supply with max. 250mA DALI output current. Communicate with DALI 1.0 ballasts or with DALI 2.0 control gears. Support of DALI device type DT8 for RGB and RGBW LED stripes. Configuration & test of DALI light system with our free software MODBUSConfigurator.







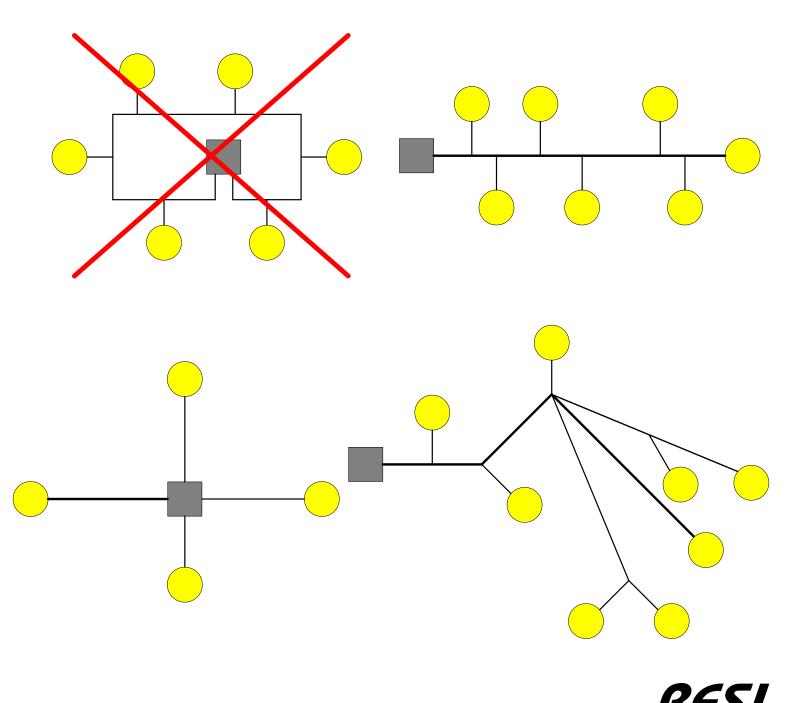
### MODBUSConfigurator

RESE's MODBUS Configurator VI.10.7.2 - [Unnam	
	Local COM port settings           Modbus unit         255 <ul> <li>Device:</li> <li>COM4</li> <li>Stopbits</li> <li>1 stopbits</li> <li>IP-Address:</li> </ul>
	Baudrale: 57600 V Parity: NONE V Port
-D New Project     ESI-DALI-SIO - [RESI-DALI-SIO]	Download config Iest connection Test RESHDALFSIO DALI to MODBUS/RTU-ASCII converter for 64 DALI lamps
- nearonaraio - [nearonaraio]	Software version: 40.0
	State: no error Initialize lamps Search lamps Query lamp states Beorder Lamps Edit Groups (initialize devices Oyery device states
	MODBUS Address: 255 • Beudrate: 57600 • Parity NONE • Stopbit: 1 stopbit •
	Aduress. 200 • Boduraie. 2000 • Pany Port. • Support •
	TestBench DALI 1.0+2.0 [Lemp status   DALI Monitor   Device status   DALI single lamp
	Single lamp 1 Pulse lamp 3 Satbrightness to 10 (0.0%)
	Iamp in the range of 1 to 64         C Set brighness to x 49,000 A)           C Set brighness to x 49,000 A)         254
	LACLing group Device command Compared Command Comm
	Select DALIamp group in the range of 1 to 16 CTTP 254 Short address 1 3 Bit Value
Deli Jamp cottingo	LI TITALE MARE I A MERANGARE I I I I
Dali lamp settings	
<u>R</u> ead lamp settings <u>W</u> rite	lamp settings <u>S</u> witch MAX Switch MIN Switch OFF
Lamp name: Lamp	Groups:
Short address: 1	✓         Device type:         8:Colour lampcontrol gear         □         9         □         10         □         11         □         13         □         14         □         15         □         16
Physical minimum: 1	Set manual device type
Minimum: 1,0x01 -> 0.3	% Maximum: 254,0xFE -> 100.00% 1: 255->MASK 5: 255->MASK 9: 255->MASK 13: 255->MASK
Power up: 254,0xFE ->	
Fade time: 10,0xA -> 16.	
Tude time. [10,004-910.	Set new parameters         4:         255->MASK         8:         255->MASK         12:         255->MASK         16:         255->MASK
Brightness: 127,0x	
-	
DT8 status Colour S	enes   Init parameters
Read colours (8 bit n	ode) Read colours (16 bit mode)
x coordinate	7777 X- X+ XY
y coordinate	77??? Y- Y+
y coordinatio	Tc+
Tc colour temperature	
recordar comperexare	Tc-
Primary N dimlevel 0	
Primary N dimlevel 1	27777 CH1
Primary N dimlevel 2	2777 CH2
Primary N dimlevel 3	
Primary N dimlevel 4	
-	
Primary N dimlevel 5	???? CH5
Channel 0 RED	254,0xFE
Channel 1 GREEN	254.0xFE 0>0.0% RGB
Channel 2 BLUE	0.0x00 254->100.0% RGBWAF
Channel 3 WHITE	
Channel 4 AMBER	????     Short addressing     Simple test     Easy setup       Initialize & test     Test all DALI 1.0/2.0     auto search for
Channel 5 FREECOLO	DALI 1.0 ballasts - devices DALI devices/lamps
RGBWAF control	Price     DALI monitor     FREE     Windows       Integrated monitor for     Download for free     based
Colour type	128,0x0080   tracing all commands   from www.RESI.cc



## DALI cable topology

The DALI allows any kind of cable topology like line, star or tree. Only a ring topology is forbidden! Maximum cable length is in total 300m depending on the following parameters: type of cable, communication speed, maximum number of connected DALI devices!



GW-35

### Q&A:DALI cabling

- DALI cabling topology
  - The DALI allows any kind of cable topology like line, star or tree. Only a ring topology is forbidden! Maximum cable length is in total 300m depending on the following parameters: type of cable, communication speed, maximum number of connected DALI devices!
- Maximum DALI cable length
  - The maximum cable length results from the maximum permitted voltage drop on the DALI cable; it is defined as a maximum of 2 V.
  - This corresponds to a maximum cable length of 300 m with a cable cross-section of 1.5 mm<sup>2</sup>.
  - CAUTION: When designing the maximum cable length, the contact resistances must also be observed! 2 V voltage drop must not be exceeded!
- Do you have more than 64 DALI ballasts on a DALI line with a DALI power supply?
  - DALI only allows a maximum of 64 ballasts on a bus line!
  - Divide the DALI bus into two separate bus lines and use two DALI power supplies
- Is your bus system longer than 300m?
  - Separate the bus system into several separate segments with your own DALI power supplies and DALI master
- Measure the DALI output voltage on the DALI-MASTER. This must be around 14V!
  - Too many lights with ballasts on the DALI bus?
  - Do the ballasts use more power than the DALI power supply can deliver?
  - Usually the DALI power supplies deliver 200mA or 250mA of current
- Does the DALI voltage drop at the ballasts?
  - There may be a maximum voltage drop on the DALI bus of 2V between the DALI supply and the DALI ballast.
  - In the event of a large voltage drop, DALI communication no longer works reliably!
  - Measure this with EVERY ballast using a voltmeter!
  - First check whether all DALI devices are working.
  - Make sure that there is no communication on the DALI line.
  - Measure the voltage on the DALI power supply.
    - The value must be between 11.5 V and 22.5 V; a typical value is 14-16 V.
      - A significantly lower value could indicate a short circuit.
      - Measure the voltage on the DALI device that is furthest away from the DALI power supply.
      - The value must be between 9.5 V and 20.5 V.
      - A much lower value indicates that there is a short circuit somewhere.
      - Create a short circuit between the two DALI bus lines on the DALI device that is furthest away from the DALI power supply.
      - Measure the voltage on the DALI power supply. The value you measure is the DALI voltage drop.
      - This value must not be higher than 2 V.
      - If it is higher than 2 V, check whether the following events have occurred:
        - DALI line too long (over 300m with 1.5mm<sup>2</sup> cross-section)
          - Cross section too small
        - High contact resistance
        - The value must be brought below 2 V.
        - Remove the short circuit between the two DALI bus lines furthest away from the DALI device.
        - This can be solved by dividing the DALI bus system into two separate DALI bus systems
- Your DALI bus cabling must be a tree structure
  - There must be no ring or loop. If so, cut this loop open!
- Recommendations of DALI cable lengths for different conductor cross-sections: DALI cable length
  - at Ø 1.5mm<sup>2</sup> max. 300m
  - at Ø 1.0mm<sup>2</sup> max. 238m
  - at Ø 0.75mm<sup>2</sup> max. 174m
  - at Ø 0.5mm<sup>2</sup> max. 116m







it's all about perfection.

#### RESI-DMX-xxx

Our powerful master gateways between DMX light bus and host. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. DMX master communication with DMX lamps in one DMX universe. Configurable time between two DMX frames.

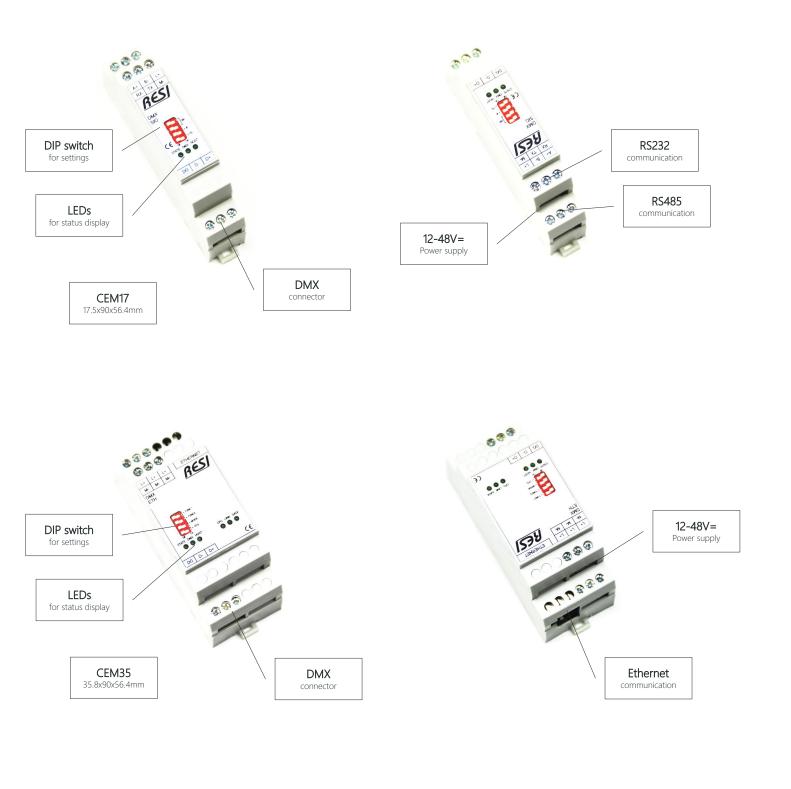


RESI-DMX-SIO	DMX Master	RS232 RS485	DMX512	30ms60s configurable DMX frame repeat speed	<b>512</b> DMX register	MODBUS/RTU Slave ASCII text protocol
RESI-DMX-ETH	DMX Master	ETHERNET	DMX512	30ms60s configurable DMX frame repeat speed	<b>512</b> DMX register	MODBUS/TCP Server ASCII text socket



#### **RESI-DMX-xxx**

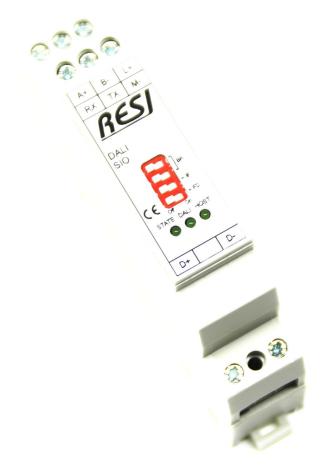
Our powerful master gateways between DMX light bus and host. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. DMX master communication with DMX lamps in one DMX universe. Configurable time between two DMX frames.





## **RESI-DMX-SIO**

Our powerful master gateway between DMX light bus and host. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. DMX master communication with DMX lamps in one DMX universe. Adjustable time between two DMX frames. Configuration & test of DMX light system with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	DMX pause Adjustable DMX pause between 2 DMX frames	DMX frame Configurable DMX frame length	DMX Support of 512 DMX register	DMX512 unidirectional master protocol
RS232 RS485	Function MODBUS to DMX r DMX light system in	naster to control a one DMX universe	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
	with max. 512 Unidirectional DMX m DMX frame	aster with adjustable	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### **RESI-DMX-ETH**

Our powerful master gateway between DMX light bus and host. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. DMX master communication with DMX lamps in one DMX universe. Adjustable time between two DMX frames. Configuration & test of DMX light system with our free software MODBUSConfigurator.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	DMX pause Adjustable DMX pause between 2 DMX frames	DMX frame Configurable DMX frame length	DMX Support of 512 DMX register	DMX512 unidirectional master protocol
ETHERNET	Function MODBUS to DMX r DMX light system in	naster to control a one DMX universe	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
	with max. 512 Unidirectional DMX m DMX frame	aster with adjustable	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# MODBUSConfigurator

REST's MODBUS Configurator V1.10.7.6 - [Unnam	ned]					
	Local COM port se	ttinge				
	Modbus unit: 255	Device: COM1	<ul> <li>Stopbits 1 sto</li> </ul>			
	Baudrate: 19200	Parity: NONE	-	Port		
	Device specific					
	↓ ↓ _ <u>D</u> ownload co	nfig				
⊡ <b>D</b> New Project						
RESI-DMX-SIO - [RESI-DMX-SIO]	RESI-DMX-SIO		DMX512 to N	10DBUS/RTU+ASCII module for up to 512 DMX	lamps	
	Software version:	????				
	State:	????				
	Stert DMX_Ston DMX	Set DMXLength Write DMX	registers Read DMX regist	-re		
		Cocoanciengin Manie DMA		5.5		Ŧ
	MODBUS	E Daudasta E7600	- Devite NONE	Stopbits: 1 stopbit		
	Address: 255	Baudrate: 57600	Parity: NONE	Stopbits: 1 stopbit		
	Register	Value		Comment		*
	4x00001	0x000A,10		Current value of DMX Register 1		=
	4x00002	0x00FF,255		Current value of DMX Register 2		
	4x00003	0x001E,30		Current value of DMX Register 3		
	4x00004	0x0000,0		Current value of DMX Register 4		
	4x00005	0×0000,0		Current value of DMX Register 5		
	4x00006	0x0000,0		Current value of DMX Register 6		
	4x00007 4x00008	0x0000,0 0x0000,0		Current value of DMX Register 7 Current value of DMX Register 8		
	4x00009	0x0000,0		Current value of DMX Register 9		
	4x00010	0x0000,0		Current value of DMX Register 10		
	4x00011	0×0000,0		Current value of DMX Register 11		
	4x00012	0x0000,0		Current value of DMX Register 12		
	4x00013	0×0000,0		Current value of DMX Register 13		
	4x00014	0x0000,0		Current value of DMX Register 14		
	4x00015 4x00016	0x0000,0 0x0000,0		Current value of DMX Register 15 Current value of DMX Register 16		
	4x00017	0x0000,0		Current value of DMX Register 17		
	4x00018	0x0000,0		Current value of DMX Register 18		
	4x00019	0×0000,0		Current value of DMX Register 19		
	4x00020	0x0000,0		Current value of DMX Register 20		
	4x00021	0×0000,0		Current value of DMX Register 21		
	4x00022	0x0000,0		Current value of DMX Register 22		
	4x00023 4x00024	0x0000,0 0x0000,0		Current value of DMX Register 23 Current value of DMX Register 24		
	4x00025	0x0000,0		Current value of DMX Register 24		
	4x00026	0x0000,0		Current value of DMX Register 26		
	4x00027	0x0000,0		Current value of DMX Register 27		
	4x00028	0x0000,0		Current value of DMX Register 28		Simple test
	4x00029	0x0000,0		Current value of DMX Register 29		Test DMX registers
	4x00030	0x0000,0		Current value of DMX Register 30		and lamps
	4x00031 4x00032	0x0000,0 0x0000,0		Current value of DMX Register 31 Current value of DMX Register 32		
	4x00032 4x00033	0x0000,0		Current value of DMX Register 32	ГРГГ	Mindows
	4000033	0,0000,0		Current value of DMX Register 33	FREE	Windows
Drint project report					Download for free	based
Print project report					from www.RESI.cc	



# LED STRIPES



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#### RESI-xLED-xxx

Our powerful master gateways for LED stripes are designed to connect the LED stripe directly to the gateway. The gateways are made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Configuration & test of LED stripe system with our free software MODBUSCOnfigurator.



RESI-1LED-SIO	LED STRIPE Master	RS232 RS485	LED STRIPEs constant voltage common anode	LED STRIPE types RGB, dual white mono colour	<b>3xPWM</b> ≤60V=,≤5A/channel	MODBUS/RTU Slave ASCII text protocol
RESI-1LED-ETH	LED STRIPE Master	ETHERNET	LED STRIPEs constant voltage common anode	LED STRIPE types RGB, dual white mono colour	<b>3xPWM</b> ≤60V=,≤5A/channel	MODBUS/TCP Server ASCII text socket
RESI-4LED-SIO	LED STRIPE Master	RS485	LED STRIPEs constant voltage common anode	LED STRIPE types RGB, dual white mono colour	<b>12xPWM</b> ≤60V=,≤5A/channel	MODBUS/RTU Slave ASCII text protocol
RESI-4LED-ETH	LED STRIPE Master	ETHERNET	LED STRIPEs constant voltage common anode	LED STRIPE types RGB, dual white mono colour	<b>12xPWM</b> ≤60V=,≤5A/channel	MODBUS/TCP Server ASCII text socket

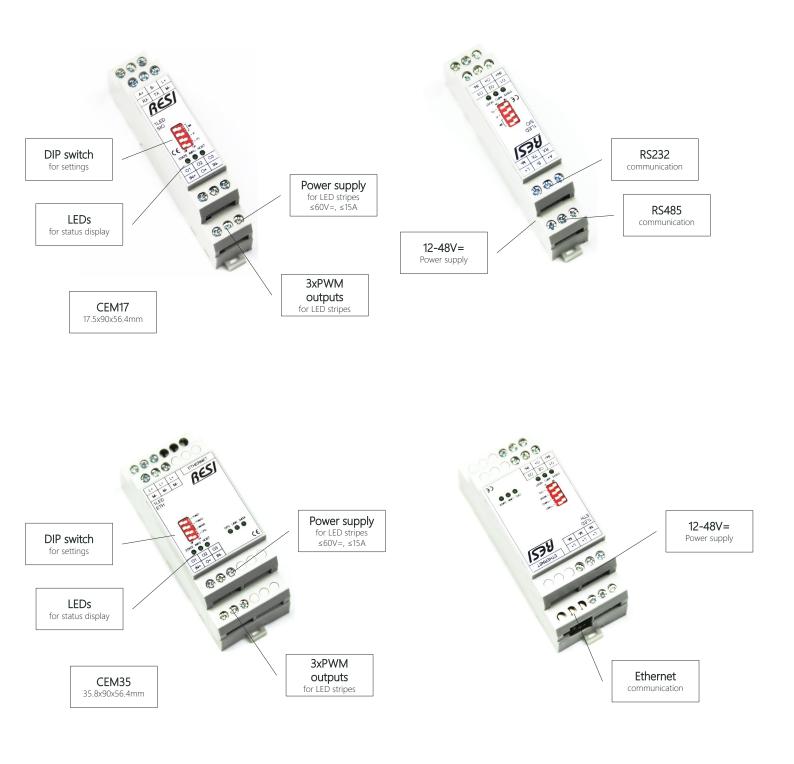


RESI-2LEDWS-SIO	WS28xx LED STRIPE Master	RS232 RS485	WS28xx LEDs each LED individually addressable	LED types WS2812 +5V WS2815 +12V	2 independent channels max 512 LEDs/channel	MODBUS/RTU Slave ASCII text protocol
RESI-2LEDWS-ETH	WS28xx LED STRIPE Master	ETHERNET	WS28xx LEDs each LED individually addressable	LED types WS2812 +5V WS2815 +12V	2 independent channels max 512 LEDs/channel	MODBUS/TCP Server ASCII text socket
RESI-2LEDWS-USB	WS28xx LED STRIPE Master	USB 1.1 USB 2.0	WS28xx LEDs each LED individually addressable	LED types WS2812 +5V WS2815 +12V	2 independent channels max 512 LEDs/channel	MODBUS/RTU Slave ASCII text protocol



#### RESI-xLED-xxx

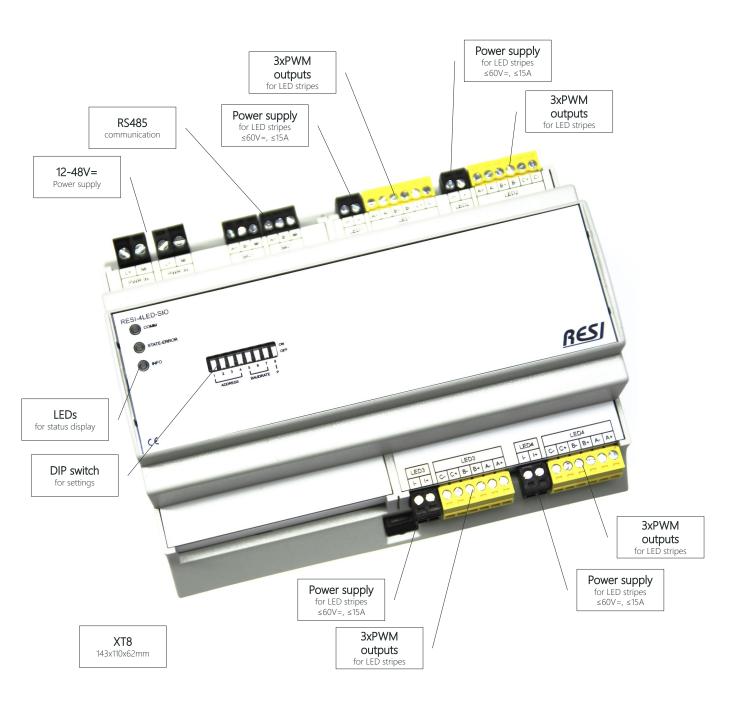
Our powerful master gateways for LED stripes are designed to connect the LED stripe directly to the gateway. The gateways are made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Configuration & test of LED stripe system with our free software MODBUSCOnfigurator.





#### RESI-xLED-xxx

Our powerful master gateways for LED stripes are designed to connect the LED stripe directly to the gateway. The gateways are made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Configuration & test of LED stripe system with our free software MODBUSConfigurator.





#### **RESI-1LED-SIO**

Our powerful master gateway for LED stripes is designed to connect LED stripes directly to the gateway. The gateway is made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/RTU or ASCII text. Host connection via RS232 or RS485 interface. Configuration & test of LED stripe system with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	LED stripe gateway	LED stripe type constant voltage common anode	<b>3xPWM outputs</b> ≤60V=, ≤5A/channel	Power supply for LEDs ≤60V=, ≤15A
RS232 RS485	Function MODBUS master Individual control of t	for LED stripes. hree PWM channels.	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
	LED stripe types: RGB, External power sup ≤60V=, ≤5A/channel,	ply for LED stripes:	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
LED DUAL COLOUR POWER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### **RESI-1LED-ETH**

Our powerful master gateway for LED stripes is designed to connect LED stripes directly to the gateway. The gateway is made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/TCP or ASCII text socket. Host connection via Ethernet interface. Configuration & test of LED stripe system with our free software MODBUSConfigurator.

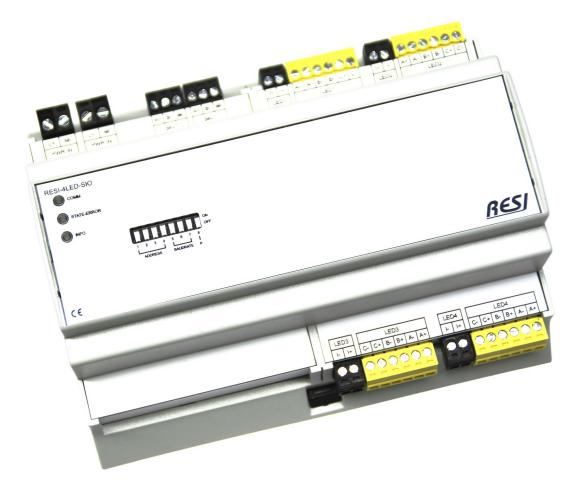


HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	LED stripe gateway	LED stripe type constant voltage common anode	<b>3xPWM outputs</b> ≤60V=, ≤5A/channel	Power supply for LEDs ≤60V=, ≤15A
ETHERNET	Function MODBUS master Individual control of f	for LED stripes. hree PWM channels.	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
	LED stripe types: RGB, External power sup ≤60V=, ≤5A/channel,	ply for LED stripes:	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
Image: Mono colour       LED       DUAL COLOUR       POWER	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



## **RESI-4LED-SIO**

Our powerful master gateway for LED stripes is designed to connect LED stripes directly to the gateway. The gateway is made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/RTU or ASCII text. Host connection via RS485 interface. Configuration & test of LED stripe system with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	LED stripe gateway	LED stripe type constant voltage common anode	<b>12xPWM outputs</b> ≤60V=, ≤5A/channel	4xpower supply for LEDs ≤60V=, ≤15A
RS485	Function MODBUS master Individual control of t	<sup>r</sup> for LED stripes. welve PWM channels.	Serial Interface RS485 300256000 baud	1xRS485 MODBUS/RTU slave ASCII text protocol
	EED stripe types: RGB, External power supply f ≤60V=, ≤5A/channel,		No, even, odd parity 8 data bits 1 or 2 stop bits	<b>XT8</b> 143x110x62mm
4X     MONO COLOUR       LED     DUAL COLOUR       POWER     0	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	WALL MOUNTING option	12-48V= Power supply



#### **RESI-4LED-ETH**

Our powerful master gateway for LED stripes is designed to connect LED stripes directly to the gateway. The gateway is made for constant voltage LED stripes with common anode. The brightness control for every channel is done via PWM output. Host protocols: MODBUS/TCP or ASCII text. Host connection via Ethernet interface. Configuration & test of LED stripe system with our free software MODBUSConfigurator.



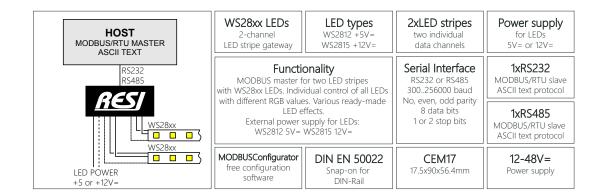
HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	LED stripe gateway	LED stripe type constant voltage common anode	<b>12xPWM outputs</b> ≤60V=, ≤5A/channel	4xpower supply for LEDs ≤60V=, ≤15A
ETHERNET	MODBUS master Individual control of t	welve PWM channels.	Ethernet Web Server for IPV4/DHCP setup MODBUS/TCP or	1xETHERNET 10/100MBit RJ45
	External power supply f ≤60V=, ≤5A/channel,	, dual or mono colour or 4 LED stripe groups: usually 12V= or 24V=	MODBUS/ICP or MODBUS/RTU via Ethernet or ASCII text protocol	<b>XT8</b> 143x110x62mm
4X     MONO COLOUR       LED     DUAL COLOUR       POWER     0	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	WALL MOUNTING option	12-48V= Power supply



# **RESI-2LEDWS-SIO**

Our powerful master gateway for LED stripes based on the addressable WS28xx LEDs is designed to connect two LED stripes with max. 512 LEDs per stripe directly to the gateway. External power supply for the LED stripes necessary: WS2812 or WS2812B +5Vdc or WS2815 +12Vdc. Every LED on the stripes can be addressed with individual RGB values. Various effects available. Host protocols: MODBUS/RTU or ASCII text. Host connection via RS232 or RS485 interface. Configuration & test of LED stripe system with our free software MODBUSConfigurator.



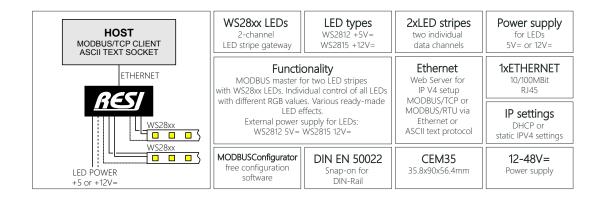




# **RESI-2LEDWS-ETH**

Our powerful master gateway for LED stripes based on the addressable WS28xx LEDs is designed to connect two LED stripes with max. 512 LEDs per stripe directly to the gateway. External power supply for the LED stripes necessary: WS2812 or WS2812B +5Vdc or WS2815 +12Vdc. Every LED on the stripes can be addressed with individual RGB values. Various effects available. Host protocols: MODBUS/TCP or ASCII text socket. Host connection via Ethernet interface. Configuration & test of LED stripe system with our free software MODBUSConfigurator.

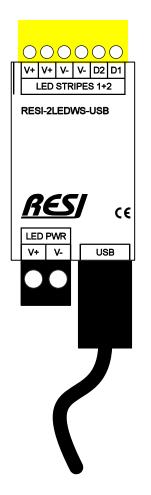






# **RESI-2LEDWS-USB**

Our powerful master gateway for LED stripes based on the addressable WS28xx LEDs is designed to connect two LED stripes with max. 512 LEDs per stripe directly to the gateway. External power supply for the LED stripes necessary: WS2812 or WS2812B +5Vdc or WS2815 +12Vdc. Every LED on the stripes can be addressed with individual RGB values. Various effects available. Host protocols: MODBUS/RTU or ASCII text. Host connection via virtual serial interface based on USB 1.1 or USB 2.0. Configuration & test of LED stripe system with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	WS28xx LEDs 2-channel LED stripe gateway	LED types WS2812 +5V= WS2815 +12V=	2xLED stripes two individual data channels	Power supply for LEDs 5V= or 12V=
	Functic MODBUS master fr with WS28xx LEDs. Indiv with different RGB value LED e External power s	or two LED stripes idual control of all LEDs s. Various ready-made ffects.	Serial Interface virtual via USB Chipset: STM32	USB USB 1.1 or USB 2.0 connection
	WS2812 5V=		BOX	MODBUS/RTU slave ASCII text protocol
LED POWER +5 or +12V=	free configuration software	Snap-on for DIN-Rail	60x25x25mm	Power supply



# MODBUSConfigurator

(					
RESI's MODBUS Configurator V1.10.7.6 - [Unnam	ed]				
	Local COM port settings				
		Device: COM1 🗸 S	Stopbits 1 stopbit 🔍 IP-Address:		
	Baudrate: 19200	Parity: NONE -	Port		
	Device specific				
		0			
	Download config	<u>Test connection</u> Test			
⊡ • D New Project	RESI-1LED-SIO		」 ┃ 1LED to MODBUS/RTU+ASCII module with 3 PWM LED cha	innels	
RESHLED-SIO - [RESHLED-SIO]				amoro	
	Software version: ????		7		
	State:	????			
	Choose demo Set LED mode	Set channel 01 Set channel 02	Set channel O <u>3</u> Set <u>f</u> ade speed Set m <u>i</u> nimum time <u>S</u> et minin	num time	
	MODBUS				
		udrate: 57600 🔹 Parity:	NONE   Stopbits: 1 stopbit		
	Register	Value	Comment		
	4x00001	0x????,?	Current value for LED channel O1 (04095=0100%)		
	4x00002 4x00003	0x????,? 0x????,?	Current value for LED channel O2 (04095=0100%) Current value for LED channel O3 (04095=0100%)		
	4x00003 4x00004	0x????,?	Current mode (0=OFF,1=ON,2=FLASH,3=FADE,4=RA		
	4x00005	0x????,?	Current fade speed for FADE, RANDOM in steps per		
	4x00006	0x????,?	Current minimum time (FLASH, SEQUENCE: in 1/10s,		
	4x00007	0x????,?	Current maximum time (FLASH, SEQUENCE:in 1/10s	, RANDOM:in s)	
	4x00008	0x????,?	Actual output value for O1 (04095=0100%)		
	4x00009 4x00010	0x????,? 0x????,?	Actual output value for O2 (04095=0100%) Actual output value for O3 (04095=0100%)		
	4x00011	0x????,?	Actual random output value for 01 (04035-0100%)	)	
	4x00012	0x????,?	Actual random output value for O2 (04095=0100%)		
	4x00013	0x????,?	Actual random output value for O3 (04095=0100%)	)	
	4x00014	0x????,?	Is fading active (0=NO, 1=YES)		
				r	
					Simple test
					Test LED stripes
					directly
					unecuy
				FREE	Windows
۰ III >					based
activate the testing mode				Download for free from www.RESI.cc	Dased
activity in the testing mode				ITOTT WWW.RESI.CC	







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#### RESI-KNX-xxx

Our powerful master gateway between KNX bus and host. Host protocols: MODBUS/RTU, MODUS/TCP or ASCII text. Host communication via RS232/RS485 serial interface or via Ethernet. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator. Additionaly we offer a very slim KNX power supply.



RESI-KNX-SIO	KNX Master	RS232 RS485	NO integrated KNX power supply	KNX	65.536 KNX group addresses	MODBUS/RTU Slave ASCII text protocol
RESI-KNX-ETH	KNX Master	ETHERNET	NO integrated KNX power supply	KNX	65.536 KNX group addresses	MODBUS/TCP Server ASCII text socket
RESI-KNX-PS	KNX Power supply	12-48V= Power supply	KNX output current ≤160mA			



RESI-KNX-GW	KNX ASCII Gateway	RS232 RS485	NO integrated KNX power supply	KNX	65.536 KNX group addresses	Simple ASCII text protocol
RESI-KNXGW-ETH	KNX ASCII Gateway	ETHERNET	NO integrated KNX power supply	KNX	65.536 KNX group addresses	Simple ASCII text protocol



#### RESI-KNX-xxx

Our powerful MODBUS/RTU master gateway to exchange data between MODBUS/RTU slave devices and KNX bus devices. Bidirectional communication with MODBUS/RTU devices via RS232 or RS485 serial interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator. Additionally we offer KNX master gateways with an integrated, switchable KNX power supply.





RESI-KNX+PS-SIO	KNX Master with integrated KNX power supply	RS485	Switchable KNX power supply ≤160mA	KNX	65.536 KNX group addresses	MODBUS/RTU Slave ASCII text protocol
RESI-KNX+PS-ETH	KNX Master with integrated KNX power supply	ETHERNET	Switchable KNX power supply ≤160mA	KNX	65.536 KNX group addresses	MODBUS/TCP Server ASCII text socket



#### RESI-KNX-xxx

Our powerful master gateway between KNX bus and host. Host protocols: MODBUS/RTU, MODUS/TCP or ASCII text. Host communication via RS232/RS485 serial interface or via Ethernet. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator. Additionaly we offer a very slim KNX power supply.





#### **RESI-KNX-SIO**

Our powerful master gateway between KNX bus and host. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	KNX↔MODBUS bidirectional gateway	KNX 65.536 group addresses supported	MODBUS all common data types supported	external <b>KNX</b> power supply necessary
RS232 RS485	Bidirectional gateway holding registers and	KNX group addresses	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
KNX	Simple configuration KNX groups and N	ta type conversion. of mapping between MODBUS registers. f mapping.	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
KNX NETWORK	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



#### **RESI-KNX-ETH**

Our powerful master gateway between KNX bus and host. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator.



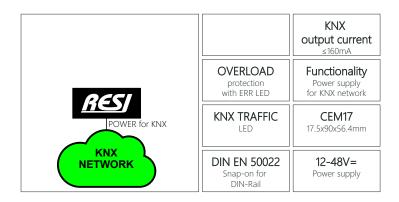
HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	KNX↔MODBUS bidirectional gateway	KNX 65.536 group addresses supported	MODBUS all common data types supported	external <b>KNX</b> power supply necessary
ETHERNET	Function Bidirectional gateway holding registers and	/ between MODBUS KNX group addresses	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
KNX	with automatic dat Simple configuration KNX groups and N Easy test o	of mapping between IODBUS registers.	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
NETWORK	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



## **RESI-KNX-PS**

Our ultra slim KNX power supply with 160mA maximum output current on the KNX bus for all KNX devices. Primary power supply with 12-48Vdc.







#### RESI-KNX-GW

Our powerful master gateway between KNX bus and media control host like PC, AMX<sup>®</sup>, Crestron<sup>®</sup> or Control4<sup>®</sup>. Host protocols: Simple ASCII text strings. Host communication via RS232 or RS485 serial interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Configuration of KNX group addresses and KNX data types with simple ASCII text strings.



HOST SIMPLE ASCII TEXT	KNX↔ASCII bidirectional gateway	KNX 65.536 group addresses supported	ASCII simple text strings for KNX send/receive	external <b>KNX</b> power supply necessary
RS232 RS485	Functional gateway be host and KNX devices u	etween media control	Serial Interface RS232 or RS485 300256000 baud	1xRS232 ASCII text protocol
KNX	Simple configuration of and data types		No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 ASCII text protocol
NETWORK	MediaControl ready use with PC, AMX <sup>©</sup> , Crestron <sup>©</sup> or Control4 <sup>©</sup>	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



## **RESI-KNXGW-ETH**

Our powerful master gateway between KNX bus and media control host like PC, AMX<sup>®</sup>, Crestron<sup>®</sup> or Control4<sup>®</sup>. Host protocols: Simple ASCII text strings via TCP/IP socket. Host communication via Ethernet interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Configuration of KNX group addresses and KNX data types with simple ASCII text strings.



HOST SIMPLE ASCII TEXT SOCKET	KNX↔ASCII bidirectional gateway	KNX 65.536 group addresses supported	ASCII simple text strings for KNX send/receive	external <b>KNX</b> power supply necessary
ETHERNET	Functional gateway be host and KNX devices u		Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
KNX	Simple configuration of and data types		ASCII text socket protocol	IP settings DHCP or static IPV4 settings
KNX NETWORK	MediaControl ready use with PC, AMX <sup>©</sup> , Crestron <sup>©</sup> or Control4 <sup>©</sup>	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# **RESI-KNX-MBMASTER**

Our powerful MODBUS/RTU master gateway to exchange data between MODBUS/RTU slave devices and KNX bus devices. Bidirectional communication with MODBUS/RTU devices via RS232 or RS485 serial interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator.



MODBUS/RTU	KNX↔MODBUS/ RTU MASTER gateway	KNX 65.536 group addresses supported	MODBUS/RTU MASTER for send/receive	external <b>KNX</b> power supply necessary
Slave devices MODBUS/RTU RS232 MASTER RS485	Functi Bidirectional ga MODBUS/RTU slave de Simple configuration requests and KNX m MODBUS	teway between vices and KNX devices. of MODBUS master apping of requested	Serial Interface RS232 or RS485 300256000 baud No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS232 MODBUS/RTU slave ASCII text protocol 1xRS485 MODBUS/RTU slave
KNX NETWORK	Stand-alone gateway between KNX and MODBUS devices	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	ASCII text protocol



#### RESI-KNX+PS-xxx

Our powerful master gateway between KNX bus and host with integrated, switchable KNX power supply. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Host communication via RS232/RS485 serial interface or Ethernet. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator.





#### RESI-KNX+PS-SIO

Our powerful master gateway between KNX bus and host with integrated, switchable KNX power supply. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	KNX↔MODBUS bidirectional gateway	KNX 65.536 group addresses supported	MODBUS all common data types supported	internal, switchable KNX power supply
RS485	Bidirectional gateway holding registers and	KNX group addresses	Serial Interface RS485 300256000 baud	KNX output current ≤160mA
KNX+POWER	Simple configuration KNX groups and N	ta type conversion. of mapping between MODBUS registers. f mapping.	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
KNX NETWORK	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail or wall mounting	<b>XT4</b> 71.3x110x62mm	12-48V= Power supply



#### RESI-KNX+PS-ETH

Our powerful master gateway between KNX bus and host with integrated, switchable KNX power supply. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Bidirectional communication with KNX devices. Support of all KNX group addresses. Mapping & testing between KNX bus and MODBUS registers with our free software MODBUSConfigurator.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	KNX↔MODBUS bidirectional gateway	KNX 65.536 group addresses supported	MODBUS all common data types supported	internal, switchable KNX power supply
ETHERNET	Bidirectional gateway holding registers and	KNX group addresses	Ethernet Web Server for IP V4 setup	KNX output current ≤160mA
KNX+POWER	with automatic dat Simple configuration KNX groups and N Easy test o	of mapping between	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	1xETHERNET 10/100MBit RJ45
KNX NETWORK	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail or wall mounting	<b>XT4</b> 71.3x110x62mm	12-48V= Power supply



# MODBUSConfigurator

RESI's MODBUS Configurator V1.10.7.2 - [C:\MBCo	onfigurator 2020\KNX Sample Ter	nperature2.mcp]				
	Local COM port settings					
	Modbus unit: 255 Baudrate: 57600	Device: COM4     Parity: NONE	Stopbits 1 stopbit	IP-Address:     Port:		
	Device specific			100		
		-aD-, Test connection	Tast			
E-D New Project			KNX to MODBUS/RTU	I+ASCII module		
RESI-KNX-SIO - [RESI-KNX-SIO]	RESI-KNX-SIO Software version: ??	??		ASCIMOULE		
	State:	????				
	Upload config					
	MODBUS Address: 255	Baudrate: 57600 🔻 F	Parity: NONE 💌 Stop!	oits: 1 stopbit 👻 Address:	15.15.255	
	-MODBUS/RTU			Address.		01/
	Register Dat	atype Interval	Factor	_	-	OK
		DAT32 • 0	1		-	Cancel
	Group Datatype		omment			
	3.5.10 FLOAT16	▼ READ ▼ A	Actual temperature			
		BUS datatype MODBUS		KNX datatype KNX direction		
		AT32 0 AT32 0	3.5.10 3.5.11	FLOAT16 READ FLOAT16 READ-WRIT	1 ???? FE 1 ????	
	4x5 UIN	F16 O	1.4.128	BIT READ-WRIT	FE 1 ????	
E         HELDTHE FINANCIAL OCCULUE MAGTER         Booldess	ed config address: 255		TS 15 255           Une D         MOCEUS regimer         MCCEUS S           1         10         SMT15           1         11         SMT15           1         13         SMT15           1         13         SMT15           1         15         SMT15           1         15         SMT16           1         15         SMT16           1         15         SMT16           1         17         SMT16           1         13         SMT16           1         13         SMT16           1         20         SMT16           1         23         SMT16           1         24         SMT16           1         25         SMT16           1         26         SMT16           1         27         SMT16           1         28         SMT16           1         29         SMT16           1         38         SMT16           1         32         SMT16	1 Temp, Assen 1 Temp, Variani 1 Temp, Variani 1 Temp, Parchland 1 Temp, Parchland 1 Temp, Parchland 1 Temp, EQ, Lantiti 1 Temp, EQ, Lantiti 1 Temp, Vardanpha 1 Temp, Vardanpha 1 Temp, Horssyns 1 Temp, Horssyns 1 Niederdack (ber) 1 Horkhruck (ber)	har ng on	
	UN KING VOIND RECEIVED	e. who angle holding hegister	1010 1	wene schreiben		
					Simple test Test read-out & display of KNX data	Easy config Simple list configuration
First project report					FREE Download for free from www.RESI.cc	Windows based



# ENOCEAN



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## RESI-ENO-xxx

Our powerful master gateways between ENOCEAN sensors and host. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Special versions with ENOCEAN ESP3 protocol. Read-out of ENOCEAN sensors. Support of all ENOCEAN frames. Additional Antennas for better radio signal.



RESI-ENO-SIO	ENOCEAN Gateway	RS232 RS485	ENOCEAN	EU 868MHz	MODBUS/RTU Slave ASCII text protocol
RESI-ENO-ETH	ENOCEAN Gateway	ETHERNET	ENOCEAN	EU 868MHz	MODBUS/TCP Server ASCII text socket
RESI-ENOCEAN-ANT	ENOCEAN Antenna	<b>116mm</b> rotation 360°, tilt 90° SMA	ENOCEAN	EU 868MHz	
RESI-ENOCEAN-ANT2	ENOCEAN Antenna with magnetic base	295mm cable 4m, magnetic base Ø 50mm, SMA	ENOCEAN	EU 868MHz	



RESI-ENO-GW	ENOCEAN Gateway	RS232 RS485	ENOCEAN	EU 868MHz	ESP3® protocol
RESI-ENOGW-ETH	ENOCEAN Gateway	ETHERNET	ENOCEAN	EU 868MHz	ESP3® protocol



## RESI-ENO-xxx

Our powerful master gateways between ENOCEAN sensors and host systems. Host protocols: MODBUS/RTU, MODBUS/TCP, ASCII text or KNX. Special versions with ENOCEAN ESP3 protocol. Read-out of ENOCEAN sensors. Support of all ENOCEAN frames. Additional Antennas for better radio signal.



RESI-RG-ENO2-K	ENOCEAN Gateway	KNX	ENOCEAN	EU 868MHz	KNX protocol
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## RESI-ENO-xxx

Our powerful master gateways between ENOCEAN sensors and host. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Special versions with ENOCEAN ESP3 protocol. Read-out of ENOCEAN sensors. Support of all ENOCEAN frames. Additional Antennas for better radio signal.





# **RESI-ENO-SIO**

Our powerful master gateway between ENOCEAN sensors and host. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. Bidirectional communication with ENOCEAN devices. Support of all ENOCEAN protocol types. ENOCEAN Antenna connector: SMA, Mapping & testing between ENOCEAN sensors and MODBUS registers with our free software MODBUSConfigurator.



HOST MODBUS/RTU MASTER ASCII TEXT	ENOCEAN↔ MODBUS bidirectional gateway		MODBUS all common data types supported	868MHz EU Version
RS232 RS485	Functional gateway holding registers and	/ between MODBUS ENOCEAN sensors	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
ENOCEAN 868MHz	with automatic dat Simple configuration ENOCEAN sensors ar Easy testing	of mapping between Id MODBUS registers.	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
ENOCEAN SENSORS	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	<b>CEM17</b> 17.5x90x56.4mm	12-48V= Power supply



### **RESI-ENO-ETH**

Our powerful master gateway between ENOCEAN sensors and host. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Bidirectional communication with ENOCEAN devices. Support of all ENOCEAN protocol types. ENOCEAN Antenna connector: SMA, Mapping & testing between ENOCEAN sensors and MODBUS registers with our free software MODBUSConfigurator.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	ENOCEAN↔ MODBUS bidirectional gateway	ENOCEAN All frame types supported	MODBUS all common data types supported	868MHz EU Version
ETHERNET	Function Bidirectional gateway holding registers and	between MODBUS ENOCEAN sensors	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
ENOCEAN 868MHz	with automatic dat Simple configuration ENOCEAN sensors ar Easy testing	of mapping between d MODBUS registers.	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
ENOCEAN SENSORS	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# RESI-ENO-GW

Our powerful master gateway between ENOCEAN sensors and host. Host protocol is ENOCEAN ESP3 protocol. Host communication via RS232 or RS485 serial interface. Bidirectional communication with ENOCEAN devices. ENOCEAN Antenna connector: SMA



HOST ENOCEAN ESP3 PROTOCOL	ENOCEAN↔ ESP®3 bidirectional gateway	ENOCEAN All frame types supported	ESP®3 host protocol	868MHz EU Version
RS232 RS485	Function Bidirectional gatew and ENOCE	vay between host	Serial Interface RS232 or RS485 300256000 baud	1xRS232 ESP3 protocol
ENOCEAN 868MHz	Host protocol is ENO	CEAN ESP3 protocol.	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 ESP3 protocol
ENOCEAN SENSORS	Own software use your own software for ENOCEAN sensors	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



# **RESI-ENOGW-ETH**

Our powerful master gateway between ENOCEAN sensors and host. Host protocol is ENOCEAN ESP3 protocol via TCP/IP socket. Host communication via Ethernet interface. Bidirectional communication with ENOCEAN devices. ENOCEAN Antenna connector: SMA

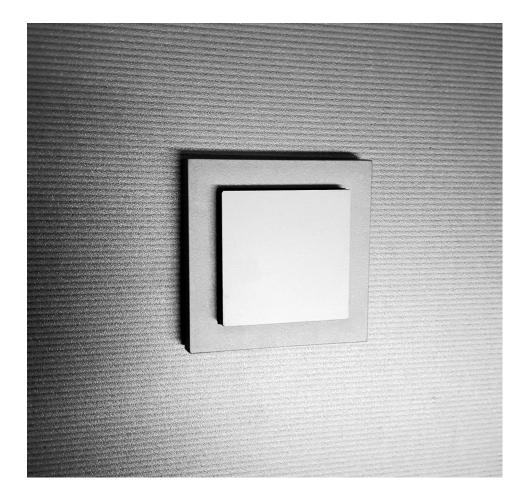


HOST ENOCEAN ESP3 PROTOCOL	ENOCEAN↔       ENOCEAN         ESP®3       All frame types         bidirectional gateway       supported		ESP®3 host protocol	868MHz EU Version
ETHERNET	Function Bidirectional gatew and ENOCE	vay between host	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
ENOCEAN 868MHz	Host protocol is ENOCEAN ESP3 protocol.		ESP3 protocol via Ethernet Socket	IP settings DHCP or static IPV4 settings
ENOCEAN SENSORS	Own software use your own software for ENOCEAN sensors	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# RESI-RG-ENO2-K

Our powerful master gateway between ENOCEAN sensors and KNX bus system. Host protocol is KNX protocol via KNX TP cable. Bidirectional communication with ENOCEAN devices. Integrated ENOCEAN Antenna.



KNX NETWORK	ENOCEAN↔ KNX bidirectional gateway	ENOCEAN All frame types supported	KNX all common data types supported	868MHz EU Version
	Bidirectional gatev group addresses and	d ÉNOCEAN sensors	KNX Interface All 65536 KNX group addresses can be used	DESIGN Various design options available
ENOCEAN 868MHz	Simple configuration ENOCEAN ser	with automatic data type conversion. Simple configuration of mapping between ENOCEAN sensors and KNX. Easy testing of mapping.		FRAMES GIRA <sup>®</sup> , BERKER <sup>®</sup> , JUNG <sup>®</sup> , SIEMENS <sup>®</sup> ,
ENOCEAN SENSORS	LIBRE OFFICE <sup>®</sup> free configuration software	On-wall mounting	SIZE 80x80x15mm	KNX Power supply



# SMI



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#### RESI-SMIx-xxx

Our powerful master gateways to control SMI (STANDARD MOTOR INTERFACE) shades and blinds. We offer two versions: One for 8 SMI motors and one for 16 SMI motors. Both with internal SMI power supply. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Special version with SMI protocol for diagnostic purposes. It is a SMI sniffer without internal SMI power supply. All products with RS232/RS485 can be used with original SMI software EasyMonitor 3.



RESI-SMI8-SIO	SMI Gateway	RS232 RS485	SMI 8 shades/blinds	Integrated <b>SMI</b> power supply	MODBUS/RTU Slave ASCII text protocol
RESI-SMI16-SIO	<b>SMI</b> Gateway	RS232 RS485	SMI 16 shades/blinds	Integrated <b>SMI</b> power supply	MODBUS/RTU Slave ASCII text protocol
RESI-SMI8-ETH	<b>SMI</b> Gateway	ETHERNET	SMI 8 shades/blinds	Integrated <b>SMI</b> power supply	MODBUS/TCP Server ASCII text socket
RESI-SMI16-ETH	SMI Gateway	ETHERNET	SMI 16 shades/blinds	Integrated <b>SMI</b> power supply	MODBUS/TCP Server ASCII text socket

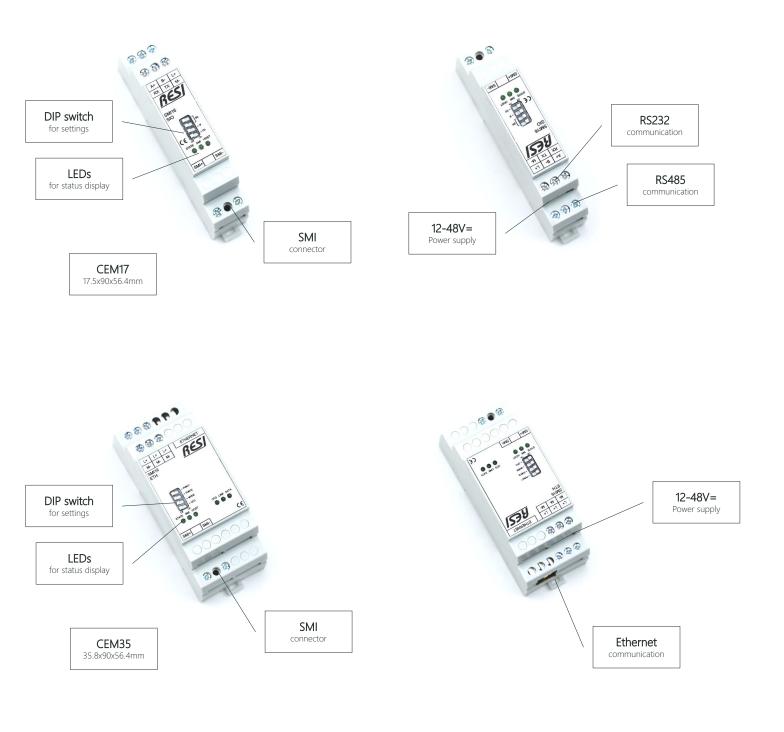


RESI-SMI16-DIAG	<b>SMI</b> Diagnostic gateway	RS232 RS485	SMI 16 shades/blinds	NO <b>SMI</b> power supply	SMI® protocol	
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#### RESI-SMIx-xxx

Our powerful master gateways to control SMI (STANDARD MOTOR INTERFACE) shades and blinds. We offer two versions: One for 8 SMI motors and one for 16 SMI motors. Both with internal SMI power supply. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Special version with SMI protocol for diagnostic purposes. It is a SMI sniffer without internal SMI power supply. All products with RS232/RS485 can be used with original SMI software EasyMonitor 3.





# RESI-SMI8-SIO

Our powerful master gateway to control SMI (STANDARD MOTOR INTERFACE) shades and blinds. Connect up to 8 SMI motors in line or star topology. Integrated SMI power supply to drive the SMI data bus. Host protocols: MODBUS/RTU or ASCII text. This gateway can be used with the original SMI software EasyMonitor 3 to configure and test the SMI installation.



HOST MODBUS/RTU MASTER ASCII TEXT	SMI↔ MODBUS bidirectional gateway	SMI All common commands supported	MODBUS/ASCII Supports both protocols	8xSMI 8 SMI motors with power supply
RS232 RS485	SMI master for se SMI commands/resp	oonses via MODBUS	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
	or ASCII to max. shades c All common SMI com are sup	or blinds. mands and responses	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	<b>CEM17</b> 17.5x90x56.4mm	12-48V= Power supply



# RESI-SMI16-SIO

Our powerful master gateway to control SMI (STANDARD MOTOR INTERFACE) shades and blinds. Connect up to 16 SMI motors in line or star topology. Integrated SMI power supply to drive the SMI data bus. Host protocols: MODBUS/RTU or ASCII text. This gateway can be used with the original SMI software EasyMonitor 3 to configure and test the SMI installation.



HOST MODBUS/RTU MASTER ASCII TEXT	SMI↔ MODBUS bidirectional gateway	SMI All common commands supported	MODBUS/ASCII Supports both protocols	16xSMI 16 SMI motors with power supply
RS232 RS485	SMI master for se SMI commands/resp	ending/receiving ponses via MODBUS	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
	or ASCII to max. shades c All common SMI com are sup	or blinds. mands and responses	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	<b>CEM17</b> 17.5x90x56.4mm	12-48V= Power supply



## **RESI-SMI8-ETH**

Our powerful master gateway to control SMI (STANDARD MOTOR INTERFACE) shades and blinds. Connect up to 8 SMI motors in line or star topology. Integrated SMI power supply to drive the SMI data bus. Host protocols: MODBUS/TCP or ASCII text.



HOST MODBUS/TCP CLIENT ASCIJ TEXT SOCKET	SMI↔ MODBUS bidirectional gateway	SMI All common commands supported	MODBUS/ASCII Supports both protocols	8xSMI 8 SMI motors with power supply
ETHERNET	Function SMI master for se SMI commands/resp	ending/receiving ponses via MODBUS	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
	or ASCII to max. shades c All common SMI com are sup	or blinds. mands and responses	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# RESI-SMI16-ETH

Our powerful master gateway to control SMI (STANDARD MOTOR INTERFACE) shades and blinds. Connect up to 16 SMI motors in line or star topology. Integrated SMI power supply to drive the SMI data bus. Host protocols: MODBUS/TCP or ASCII text.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	SMI↔ MODBUS bidirectional gateway	SMI All common commands supported	MODBUS/ASCII Supports both protocols	16xSMI 16 SMI motors with power supply
ETHERNET	Function SMI master for set SMI commands/resp	ending/receiving ponses via MODBUS	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
	or ASCII to max. shades c All common SMI com are sup	or blinds. mands and responses	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# RESI-SMI16-DIAG

Our powerful diagnostic gateway to check and control SMI (STANDARD MOTOR INTERFACE) shades and blinds. Connect up to 16 SMI motors in line or star topology together with an additional SMI master. The gateway has NO Integrated SMI power supply to drive the SMI data bus. The gateway communicates with the standard SMI protocol and forwards the complete SMI communication to the RS232 or RS485. This gateway can be used with the original SMI software EasyMonitor 3 to configure and test the SMI installation.



HOST SMI protocol	SMI↔ MODBUS bidirectional gateway	SMI All common commands supported	SMI protocol Supports all common commands	16xSMI 16 SMI motors NO power supply
RS232 RS485	SMI commands to SMI c	y for logging/sending Irives for shades/blinds.	Serial Interface RS232 or RS485 2400 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
SMI	Sniff the complete SMI c a SMI master a		No parity 8 data bits 1 stop bit	1xRS485 MODBUS/RTU slave ASCII text protocol
SMI MOTORs RCSI	MODBUSConfigurator free configuration software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



# TCP↔SERIAL



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#### RESI-1RSxxx-xxx

Our TCP to serial gateways with three operation modes: MODBUS/TCP Server to MODBUS/RTU master protocol conversion, MODBUS/RTU master via TCP/IP socket, Transparent data exchange between TCP/IP socket and serial line.

Galvanic insulated serial line extenders with two independent serial interfaces for extending MODBUS/RTU networks or for integration of various devices with RS232 or RS485 interface. Individual baud rate, data bits, parity and stop bit settings for both interfaces possible. Special versions with second protocol available.



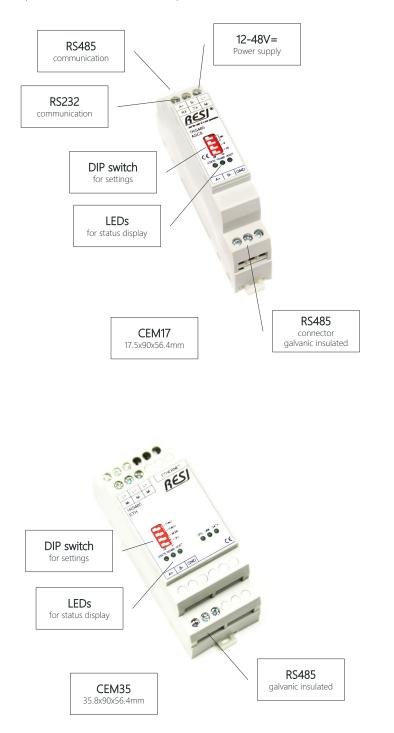
RESI-1RS232-ETH	MODBUS/TCP MODBUS/RTU Gateway	RS232 RS485	RS232	TRANSPARENT protocol	MODBUS/RTU via ETHERNET protocol	MODBUS/TCP protocol
RESI-1RS485-ETH	MODBUS/TCP MODBUS/RTU Gateway	ETHERNET	RS485	TRANSPARENT protocol	MODBUS/RTU via ETHERNET protocol	MODBUS/TCP protocol
RESI-1RS232-SIO	MODBUS/RTU MODBUS/RTU Gateway	RS232 RS485	RS232	USER SPECIFIC protocols	TRANSPARENT protocol	MODBUS/RTU protocol
RESI-1RS485-SIO	MODBUS/RTU MODBUS/RTU Gateway	RS232 RS485	RS485	USER SPECIFIC protocols	TRANSPARENT	MODBUS/RTU protocol

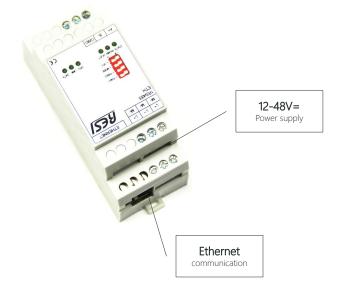


#### RESI-1RSxxx-xxx

Our TCP to serial gateways with three operation modes: MODBUS/TCP Server to MODBUS/RTU master protocol conversion, MODBUS/RTU master via TCP/IP socket, Transparent data exchange between TCP/IP socket and serial line.

Galvanic insulated serial line extenders with two independent serial interfaces for extending MODBUS/RTU networks or for integration of various devices with RS232 or RS485 interface. Individual baud rate, data bits, parity and stop bit settings for both interfaces possible. Special versions with second protocol available.







#### RESI-1RS485-ETH

Our TCP to serial gateways with three operation modes: MODBUS/TCP Server to MODBUS/RTU master protocol conversion, MODBUS/RTU master via TCP/IP socket, Transparent data exchange between TCP/IP socket and RS485 serial interface.



HOST MODBUS/TCP↔RTU TCP↔SERIAL	TCP to SERIAL Gateway	MODBUS TCP↔RTU	MODBUS RTU via Ethernet	TRANSPARENT Ethernet↔RS485
ETHERNET	Bidirectional gateway b and RS485 interf	ace with various	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
R5485	protocol p Integrated MODBUS/ frame co		MODBUS/TCP or MODBUS/RTU via Ethernet or transparent protocol	IP settings DHCP or static IPV4 settings
RS485 NETWORK	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



### RESI-1RS232-ETH

Our TCP to serial gateways with three operation modes: MODBUS/TCP Server to MODBUS/RTU master protocol conversion, MODBUS/RTU master via TCP/IP socket, Transparent data exchange between TCP/IP socket and RS232 serial interface.



HOST MODBUS/TCP++RTU TCP+++SERIAL	TCP toMODBUSSERIAL GatewayTCP↔RTU		MODBUS RTU via Ethernet	TRANSPARENT Ethernet↔RS232
ETHERNET	Bidirectional gateway l and RS232 inter	ace with various	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
RS232	protocol p Integrated MODBUS/ frame cc		MODBUS/TCP or MODBUS/RTU via Ethernet or transparent protocol	IP settings DHCP or static IPV4 settings
RS232 DEVICE	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



### RESI-1RS485-SIO

Our serial gateways with two galvanic insulated serial interfaces. Used for media conversion between RS232/RS485 and RS485 interface or for line extension on RS485. Individual baud rate, data bits, parity and stop bit settings for both interfaces possible. Transparent data exchange between the two serial interfaces. Special versions with integrated protocol conversion available.



HOST MODBUS/RTU⇔RTU SERIAL⇔SERIAL	MODBUS/RTU↔RTU			Galvanic insulated
RS232 RS485	Bidirectional ga RS232/RS485 ser	ial interface and	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS or ASCII text protocol
	second RS485 Different settings (b between both s	baud rate, parity,)	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS or ASCII text protocol
RS485 NETWORK	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



# RESI-1RS232-SIO

Our serial gateways with two galvanic insulated serial interfaces. Used for media conversion between RS232/RS485 and RS232 interface. Individual baud rate, data bits, parity and stop bit settings for both interfaces possible. Transparent data exchange between the two serial interfaces. Special versions with integrated protocol conversion available.



HOST MODBUS/RTU⇔RTU SERIAL⇔SERIAL	SERIAL to RS232 Gateway	MODBUS RTU↔RTU	RS485↔RS232 RS232↔RS232	Galvanic insulated
R5232 R5485	Bidirectional ga RS232/RS485 ser	ial interface and	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS or ASCII text protocol
R5232	second RS232 Different settings (b between both s	aud rate, parity,)	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS or ASCII text protocol
RS232 DEVICE	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



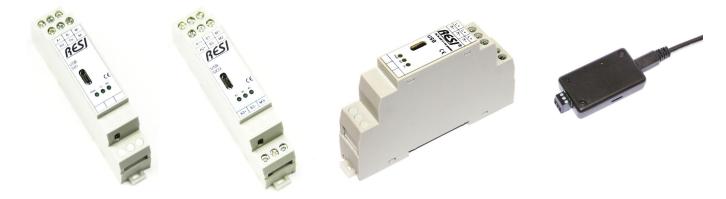




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### RESI-USB-xxx

Our USB to serial gateways offer either a RS232 or RS485 interface or three RS485 interfaces. USB standard is USB 1.1/USB.2.0. In addition we offer a USB power supply with 700mA USB output current. We offer a RS232/RS485 USB gateway with a box housing designed for laptop usage.

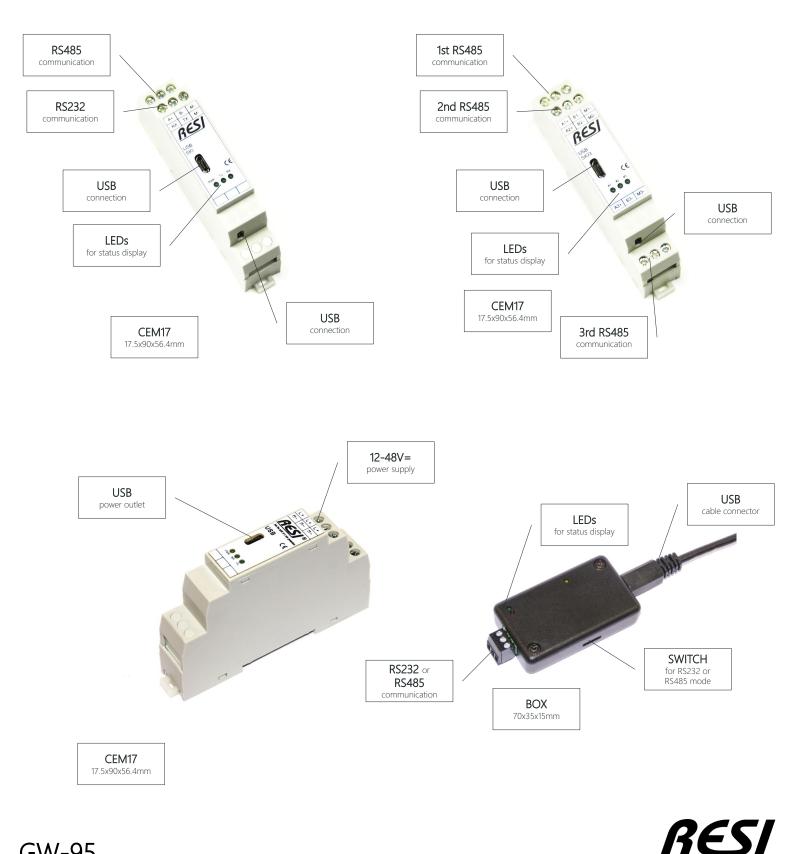


RESI-USB-SIO	USB↔SERIAL Gateway	USB 1.1 USB 2.0	RS232 or RS485	Silicon Labs CP2103 chipset	RS485 Automatic TX/RX flow control
RESI-USB-SIO3	USB↔SERIAL Gateway	USB 1.1 USB 2.0	3xRS485	ST Microsystems STM32 chipset	RS485 Automatic TX/RX flow control
RESI-USB-BOX	USB↔SERIAL Gateway	USB 1.1 USB 2.0	RS232 or RS485	Silicon Labs CP2103 chipset	RS485 Automatic TX/RX flow control
RESI-USB-PS	USB Power supply	12-48V= Power supply	USB Power supply outlet	<b>≤700mA USB</b> output current	



### **RESI-USB-xxx**

Our USB to serial gateways offer either a RS232 or RS485 interface or three RS485 interfaces. USB standard is USB 1.1/USB.2.0. In addition we offer a USB power supply with 700mA USB output current. We offer a RS232/RS485 USB gateway with a box housing designed for laptop usage.



# **RESI-USB-SIO**

Our USB to serial gateway offers either a RS232 or RS485 interface. USB standard is USB 1.1/USB.2.0.



HOST USB to 1xserial	USB to SERIAL Gateway	USB 1.1 USB 2.0	RS232 or RS485	Galvanic insulated
USB 1.1/2.0	Function USB to serial inter Silicon Labs C		Serial Interface RS232 or RS485 3001Mbaud	1xRS232 1xRS485
RS232 or RS485	Use either RS232 c via US		No, even, odd parity 8 data bits 1 or 2 stop bits	USB Via two connectors
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	USB Power supply



# **RESI-USB-SIO3**

Our USB to serial gateway offers three RS485 interfaces. USB standard is USB 1.1/USB.2.0.



HOST USB to 3xserial	USB to SERIAL Gateway USB 2.0		RS232 or RS485	Galvanic insulated
	Function USB to serial inter STMicrosystems		Serial Interfaces 3xRS485 3001Mbaud	3xRS485 Via terminals
R5485 R5485	Use all three RS48! via US		No, even, odd parity 8 data bits 1 or 2 stop bits	USB Via two connectors
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	USB Power supply



# **RESI-USB-BOX**

Our USB to serial gateway offers either a RS232 or RS485 interface. USB standard is USB 1.1/USB.2.0.



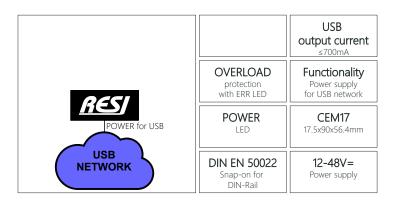
HOST USB to 1xserial	USB to SERIAL Gateway	USB 1.1 USB 2.0	RS232 or RS485	Galvanic insulated
	Function USB to serial inter Silicon Labs C	erface based on	Serial Interface RS232 or RS485 3001Mbaud	1xRS232 1xRS485
R5232 or R5485	Use either RS232 o via US		No, even, odd parity 8 data bits 1 or 2 stop bits	USB Via one connector
	Own software use your own software	LAPTOP/PC for use with mobile devices	BOX 70x35x15mm	USB Power supply



# **RESI-USB-PS**

Our USB power supply can power a USB bus system with 700mA output current. Primary power supply 12-48Vdc.







# SMART METER



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#### RESI-xSO-xxx

Our powerful S0 gateways count S0 impulses from connected meters with impulse outputs. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Internal ferro magnetic memory to save the actual counter values in case of power lost. Internal calculation of accumulated energy with multiplication factor for impulses. User setup of mute time in ms after a valid pulse detection to avoid wrong counting due to glitches on the signal. Versions with one or two S0 counter inputs available.

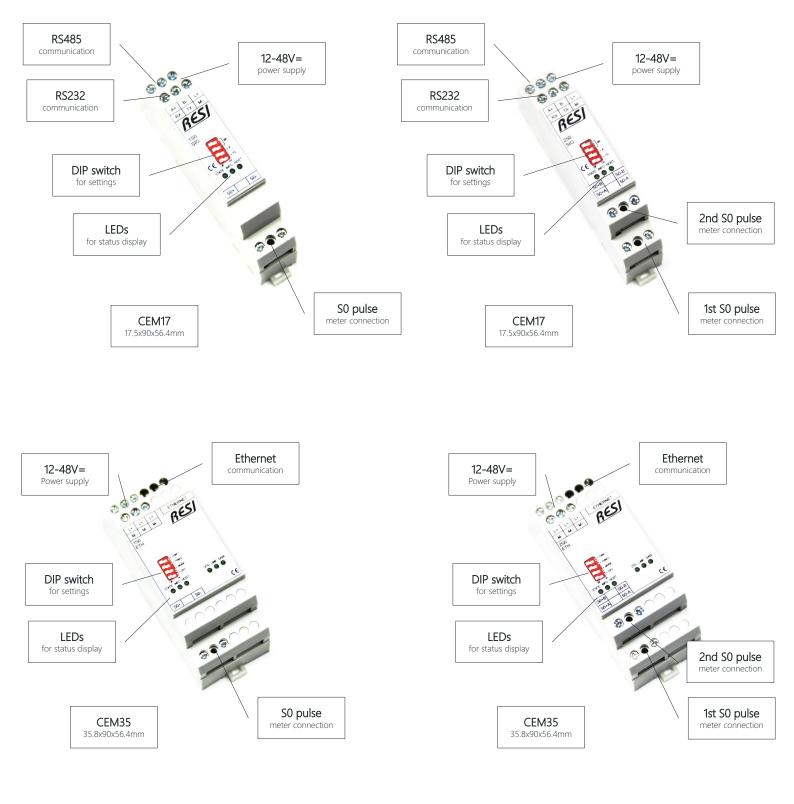


RESI-1SO-SIO	RS232 RS485	1xS0	1 Meter	IMPULSE counting	MODBUS/RTU Slave ASCII text protocol
RESI-2S0-SIO	RS232 RS485	1xS0	2 Meter	IMPULSE counting	MODBUS/RTU Slave ASCII text protocol
RESI-1SO-ETH	ETHERNET	2xS0	1 Meter	IMPULSE counting	MODBUS/TCP Server ASCII text socket
RESI-2S0-ETH	ETHERNET	2xS0	2 Meter	IMPULSE counting	MODBUS/TCP Server ASCII text socket



## RESI-xSO-xxx

Our powerful S0 gateways count S0 impulses from connected meters with impulse outputs. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Internal ferro magnetic memory to save the actual counter values in case of power lost. Internal calculation of accumulated energy with multiplication factor for impulses. User setup of mute time in ms after a valid pulse detection to avoid wrong counting due to glitches on the signal. Versions with one or two S0 counter inputs available.





GW-102.

# RESI-1SO-SIO

Our powerful S0 gateway counts S0 impulses from one connected meter with impulse output. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. Internal ferro magnetic memory to save the actual counter values in case of power lost. Internal calculation of accumulated energy with multiplication factor for impulses. User setup of mute time in ms after a valid pulse detection to avoid wrong counting due to glitches on the signal.



HOST MODBUS/RTU MASTER ASCII TEXT	1xS0 pulse     S0 pulse       counting module     duration       ≥30ms		S0 current Ityp ~13.6mA Imax ≤20mA	S0 voltage
RS232 RS485	Function Counts S0 pulses to smart meter with	rom a connected S0 pulse output	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
	or reed Individual configurati and multiplication facto	on of pulse duration	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
SO HELECTRICITY WATER METER	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



# RESI-2S0-SIO

Our powerful S0 gateway counts S0 impulses from two connected meters with impulse output. Host protocols: MODBUS/RTU or ASCII text. Host communication via RS232 or RS485 serial interface. Internal ferro magnetic memory to save the actual counter values in case of power lost. Internal calculation of accumulated energy with multiplication factor for impulses. User setup of mute time in ms after a valid pulse detection to avoid wrong counting due to glitches on the signal.

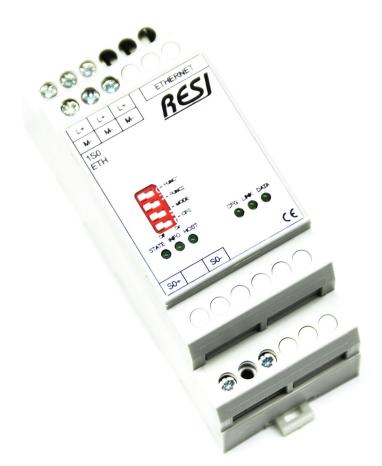


HOST MODBUS/RTU MASTER ASCII TEXT	2xS0 pulse counting module			S0 voltage
RS232 RS485	RS232 Functionality			1xRS232 MODBUS/RTU slave ASCII text protocol
				1xRS485 MODBUS/RTU slave ASCII text protocol
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



# RESI-1SO-ETH

Our powerful S0 gateway counts S0 impulses from one connected meter with impulse output. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Internal ferro magnetic memory to save the actual counter values in case of power lost. Internal calculation of accumulated energy with multiplication factor for impulses. User setup of mute time in ms after a valid pulse detection to avoid wrong counting due to glitches on the signal.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	1xS0 pulse counting module	S0 pulse duration ≥30ms	S0 current Ityp ~13.6mA Imax ≤20mA	S0 voltage
ETHERNET	Functionality Counts S0 pulses from a connected smart meter with S0 pulse output		Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
	or reed contact. Individual configuration of pulse duration and multiplication factor for energy calculation.		MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# RESI-2SO-ETH

Our powerful S0 gateway counts S0 impulses from two connected meters with impulse output. Host protocols: MODBUS/TCP or ASCII text socket. Host communication via Ethernet interface. Internal ferro magnetic memory to save the actual counter values in case of power lost. Internal calculation of accumulated energy with multiplication factor for impulses. User setup of mute time in ms after a valid pulse detection to avoid wrong counting due to glitches on the signal.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	2xS0 pulse counting module	S0 pulse duration ≥30ms	S0 current Ityp ~8.2mA Imax ≤20mA	S0 voltage 15V=
ETHERNET	Functionality Counts S0 pulses from two connected smart meter with S0 pulse output		Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
	or reed contact. Individual configuration of pulse duration and multiplication factor for energy calculation.		MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# RESI-1EGYDCx-xxx

Our powerful DC energy meters measures the DC voltage and DC current either with an external shunt or with an external Hall sensor. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Internal ferro magnetic memory to save the actual values in case of power lost. Internal calculation of power and energy.

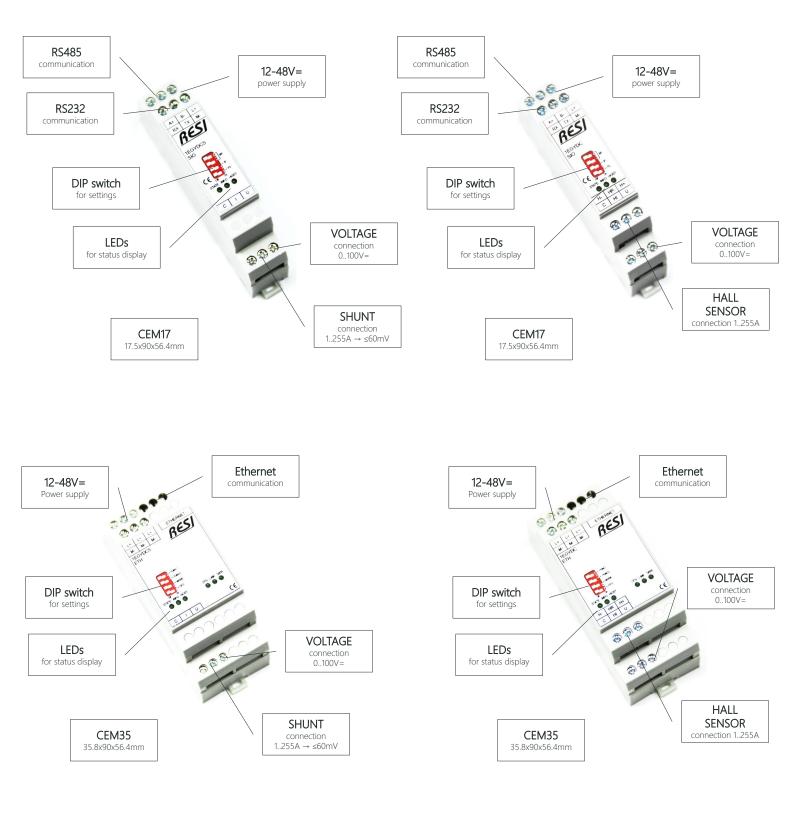


RESI-1EGYDCS-SIO	RS232 RS485	1xDC SMART METER	1 Meter	U: ≤100V= I: ≤255A	SHUNT measurement of DC CURRENT	MODBUS/RTU Slave ASCII text protocol
RESI-1EGYDC-SIO	RS232 RS485	1xDC SMART METER	1 Meter	U: ≤100V= I: ≤255A	HALL SENSOR measurement of DC CURRENT	MODBUS/RTU Slave ASCII text protocol
RESI-1EGYDCS-ETH	ETHERNET	1xDC SMART METER	1 Meter	U: ≤100V= I: ≤255A	SHUNT measurement of DC CURRENT	MODBUS/TCP Server ASCII text socket
RESI-1EGYDC-ETH	ETHERNET	1xDC SMART METER	1 Meter	U: ≤100V= I: ≤255A	HALL SENSOR measurement of DC CURRENT	MODBUS/TCP Server ASCII text socket



# RESI-1EGYDCx-xxx

Our powerful DC energy meters measures the DC voltage and DC current either with an external shunt or with an external Hall sensor. Host protocols: MODBUS/RTU, MODBUS/TCP or ASCII text. Internal ferro magnetic memory to save the actual values in case of power lost. Internal calculation of power and energy.





GW-108

#### RESI-1EGYDCS-SIO

Our powerful DC energy meter measures the DC voltage and DC current with an external shunt. Shunt currents between 1 and 255A. Shunt output voltage  $\leq$ 60mA. Host protocols: MODBUS/RTU or ASCII text. Internal ferro magnetic memory to save the actual values in case of power lost. Internal calculation of power and energy.



HOST MODBUS/RTU MASTER ASCII TEXT	1xDC ENERGY METER	SHUNT measurement	DC voltage Vmax ≤100V	DC current Imax ≤255A
RS232 RS485 DC ≤100V	Function Measures DC voc Calculates DC poc DC current measurement	ower and energy.	Serial Interface RS232 or RS485 300256000 baud	1xRS232 MODBUS/RTU slave ASCII text protocol
1xDC		ent with external shunt. ⁄oltage ≤60mV.	No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



GW-109

## **RESI-1EGYDC-SIO**

Our powerful DC energy meter measures the DC voltage and DC current with an external hall sensor. Hall sensor currents between 1 and 255A. Host protocols: MODBUS/RTU or ASCII text. Internal ferro magnetic memory to save the actual values in case of power lost. Internal calculation of power and energy.



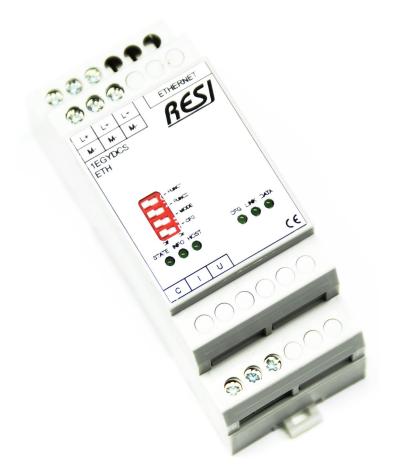
HOST MODBUS/RTU MASTER ASCII TEXT	1xDC ENERGY METER	HALL SENSOR measurement	DC voltage Vmax ≤100V	DC current Imax ≤255A
R\$232 R\$485 DC ≤100V	Function Measures DC vo Calculates DC po DC current mea	Itage & current. wer and energy.	Serial Interface RS232 or RS485 300.256000 baud1xRS232 MODBUS/RTU sl ASCII text proto	
1xDC	external h		No, even, odd parity 8 data bits 1 or 2 stop bits	1xRS485 MODBUS/RTU slave ASCII text protocol
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM17 17.5x90x56.4mm	12-48V= Power supply



GW-110

## **RESI-1EGYDCS-ETH**

Our powerful DC energy meter measures the DC voltage and DC current with an external shunt. Shunt currents between 1 and 255A. Shunt output voltage  $\leq 60$ mA. Host protocols: MODBUS/TCP or ASCII text socket. Internal ferro magnetic memory to save the actual values in case of power lost. Internal calculation of power and energy.

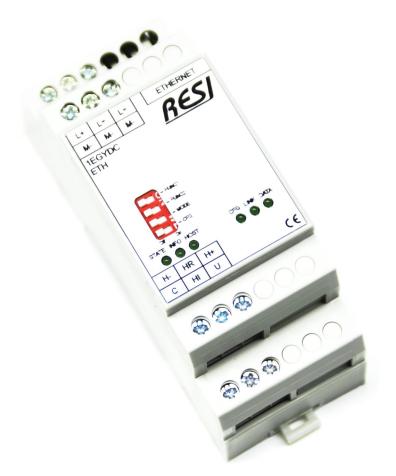


HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET			DC voltage Vmax ≤100V	DC current Imax ≤255A
ETHERNET	Measures DC vo Calculates DC po	ower and energy.	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
100V ≤255A	DC current measureme Shunt output v	ent with external shunt. ⁄oltage ≤60mV.	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



## RESI-1EGYDC-ETH

Our powerful DC energy meter measures the DC voltage and DC current with an external hall sensor. Hall sensor currents between 1 and 255A. Host protocols: MODBUS/TCP or ASCII text socket. Internal ferro magnetic memory to save the actual values in case of power lost. Internal calculation of power and energy.



HOST MODBUS/TCP CLIENT ASCII TEXT SOCKET	1xDC ENERGY METER	HALL SENSOR measurement	DC voltage Vmax ≤100V	DC current Imax ≤255A
ETHERNET DC	Measures DC vo Calculates DC po	ower and energy.	Ethernet Web Server for IP V4 setup	1xETHERNET 10/100MBit RJ45
≤100V ≤255A		asurement with Iall sensor. oltage 2.5V±0.625V.	MODBUS/TCP or MODBUS/RTU via Ethernet or ASCII text protocol	IP settings DHCP or static IPV4 settings
	Own software use your own software	DIN EN 50022 Snap-on for DIN-Rail	CEM35 35.8x90x56.4mm	12-48V= Power supply



# **POWER SUPPLIES**



it's all about perfection

## **POWER-SUPPLIES**

We offer various power supplies from AC to DC and especially from DC to DC for TELECOM applications. We offer also a powerful DC UPS with MODBUS/RTU RS485 interface.



RESI-PS-65W-24V	24Vdc power supply	80264V~ primary power supply	24V= ≤2.71A secondary power supply	6xTERMINALs for 24V= connection	<b>XT5</b> 87.8x110x62mm
RESI-PS-65W-12V	12Vdc power supply	80264V~ primary power supply	12V= ≤5.42A secondary power supply	6xTERMINALs for 12V= connection	<b>XT5</b> 87.8x110x62mm
RESI-PS-65W-5V	5Vdc power supply	80264V~ primary power supply	5V= ≤10A secondary power supply	6xTERMINALs for 5V= connection	<b>XT5</b> 87.8x110x62mm
RESI-PS-T-65W-24V	24Vdc power supply	-6036V= primary power supply	24V= ≤2.71A secondary	6xTERMINALs for 24V= connection	XT5 87.8x110x62mm
		power suppry	power supply		
		power supply	power suppry		
RESI-DC-UPS-60W-24V		24VDC UPS uninterruptable power supply	24V= primary power supply	5xTERMINALs for 24V= connection	<b>XT12</b> 213x110x62mm







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## CLOCK

We offer various real time clock units with RS485 or KNX interface.





RESI-RC-RTC1-MB	REALTIME CLOCK	RS485 Interface	12-48Vdc Power supply	FRAMES GIRA°, BERKER°, JUNG°, SIEMENS°,	IN-WALL mounting	MODBUS/RTU Slave ASCII text protocol
RESI-RC-RTC1-KP	REALTIME CLOCK	KNX Interface	24Vdc Power supply	FRAMES GIRA®, BERKER®, JUNG®, SIEMENS®,	IN-WALL mounting	KNX protocol
RESI-RC-RTC2-SIO	REALTIME CLOCK	RS485+KNX Interface	12-48Vdc Power supply	MODERN DESIGN	ON-WALL mounting	MODBUS, ASCII or KNX protocol



## RESI-RC-RTC1-MB

Our real time clock for in-wall mounting into a standard 55mm socket outlet. Time synchronization via RS485 interface and MODBUS/RTU or ASCII protocol.





HOST MODBUS/RTU MASTER ASCII TEXT	RS485 realtime clock	DISPLAY date, time, seconds, year, month, day	Synchronization via RS485	
RS485 12-48V=	Functi Realtime clock with RS485 ir External 12-48Va	nterface.	Interface MODBUS/RTU or ASCII Text protocol for	DESIGN Various design options available
DATE, TIME, SECONDS	nece Various disp	ssary.	date & time synchronization and parameters	FRAMES GIRA®, BERKER®, JUNG®, SIEMENS®,
YEAR, MONTH, DAY Sync via RS485	LIBRE OFFICE <sup>®</sup> free configuration software	In-wall mounting	SIZE 80x80x8mm	12-48V= Power supply



## RESI-RC-RTC1-KP

Our real time clock for in-wall mounting into a standard 55mm socket outlet. Time synchronization via KNX interface and KNX protocol. Additional 24Vdc power supply necessary.





KNX NETWORK	KNX realtime clock	KNX all common data types supported	DISPLAY date, time, seconds, year, month, day	Synchronisation via KNX
+24V=KNX	Function Realtime clock with KNX int	accu backup with erface.	KNX Interface All 65536 KNX group addresses can be used	DESIGN Various design options available
DATE, TIME, SECONDS	External 24Vdc nece: Various disp date, time, y	lay modes:	Mapping is downloaded via KNX	FRAMES GIRA <sup>®</sup> , BERKER <sup>®</sup> , JUNG <sup>®</sup> , SIEMENS <sup>®</sup> ,
YEAR, MONTH, DAY Sync via KNX	LIBRE OFFICE <sup>®</sup> free configuration software	In-wall mounting	SIZE 80x80x8mm	24V= Power supply



## RESI-RC-RTC2-SIO

Our real time clock for on-wall mounting onto a socket outlet. Time synchronization via KNX or RS485 interface and MODBUS/RTU, ASCII or KNX protocol. Additional 12-48Vdc power supply necessary.



HOST MODBUS/RTU MASTER	RS485 & KNX realtime clock	MODBUS/KNX all common data types supported	<b>DISPLAY</b> date, time, seconds, year, month, day	Synchronisation via KNX or RS485
12-48V= R5485	Realtime clock with RS485 & KN		Interface All 65536 KNX group addresses can be used MODBUS/RTU Slave	DESIGN Various design options available
date, time, seconds	Various disp date, time, y	olay modes: ear, seconds	or ASCII text protocol	MODERN DESIGN
YEAR, MONTH, DAY Sync via RS485	LIBRE OFFICE <sup>®</sup> free configuration software	On-wall mounting	<b>SIZE</b> 100x235x35mm	12-48V= Power supply



## ACCESSORIES



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## ACCESSORIES

Here you will find additional articles to complete our portfolio.



RESI-RS485BA	RS485 passive bus termination	RS485	2 independed RS485 line terminators	DIP switch for enable/disable	<b>CEM17</b> 17.5x90x56.4mm
RESI-RS485BA-BOX	RS485 passive bus termination	RS485	1 independed RS485 line terminator		<b>BOX</b> 40x20x15mm



RESI-SW-5G	5 port SWITCH unmanaged	5xRJ45		1248V= power supply	<b>XT2</b> 35x110x60mm
RESI-SW-7G	7 port SWITCH unmanaged	7xRJ45		1248V= power supply	<b>XT2</b> 35x110x60mm
RESI-SW-5G-1SF	6 port SWITCH unmanaged	5xRJ45	1xSFP Slot	1248V= power supply	<b>XT2</b> 35x110x60mm
RESI-SW-5G-2SF	7 port SWITCH unmanaged	5xRJ45	2xSFP Slot	1248V= power supply	<b>XT2</b> 35x110x60mm



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