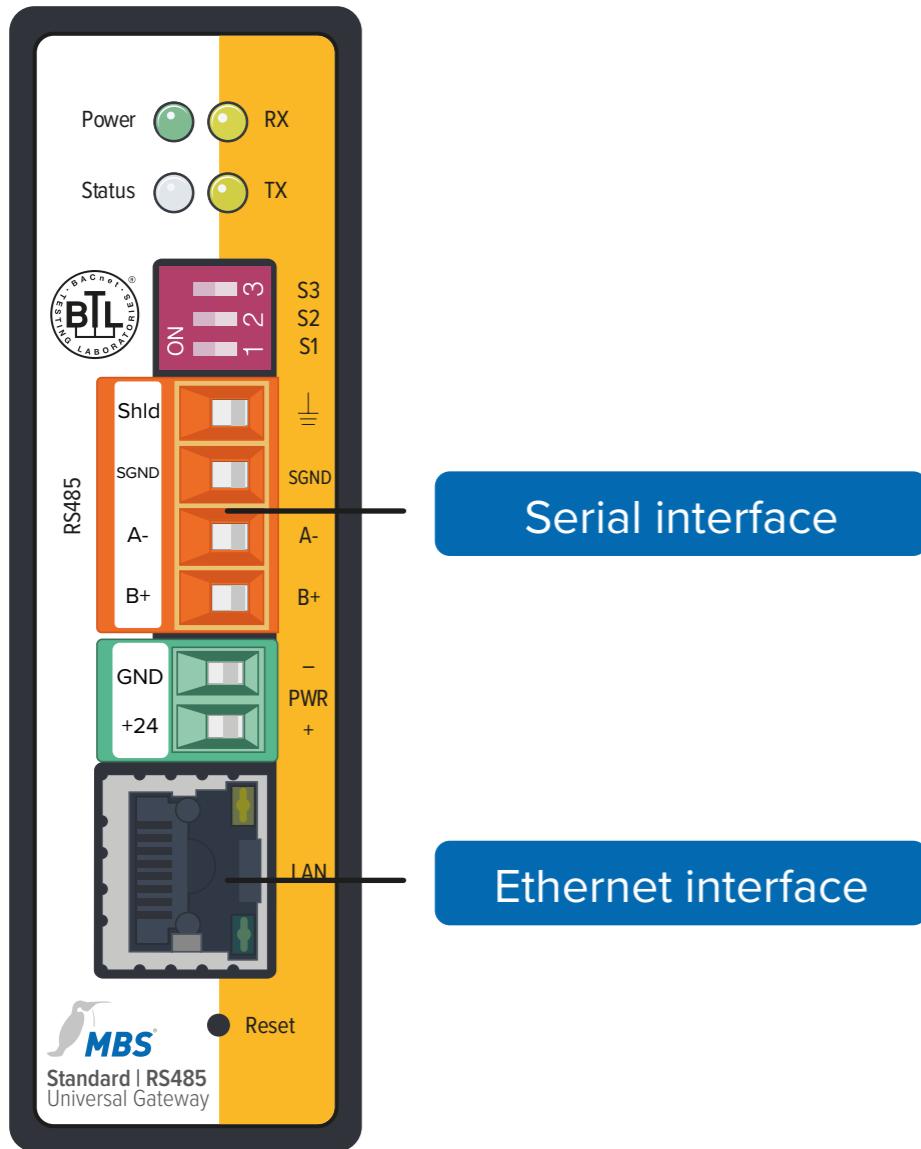


# MBS Gateway Functionality

- Protocol drivers receive the telegrams at the interfaces or send them there.
- The protocol drivers send the transmitted values to the central software of the gateway (data point manager).
- This central software of the gateway communicates the transmitted values to the protocol driver of the target protocol

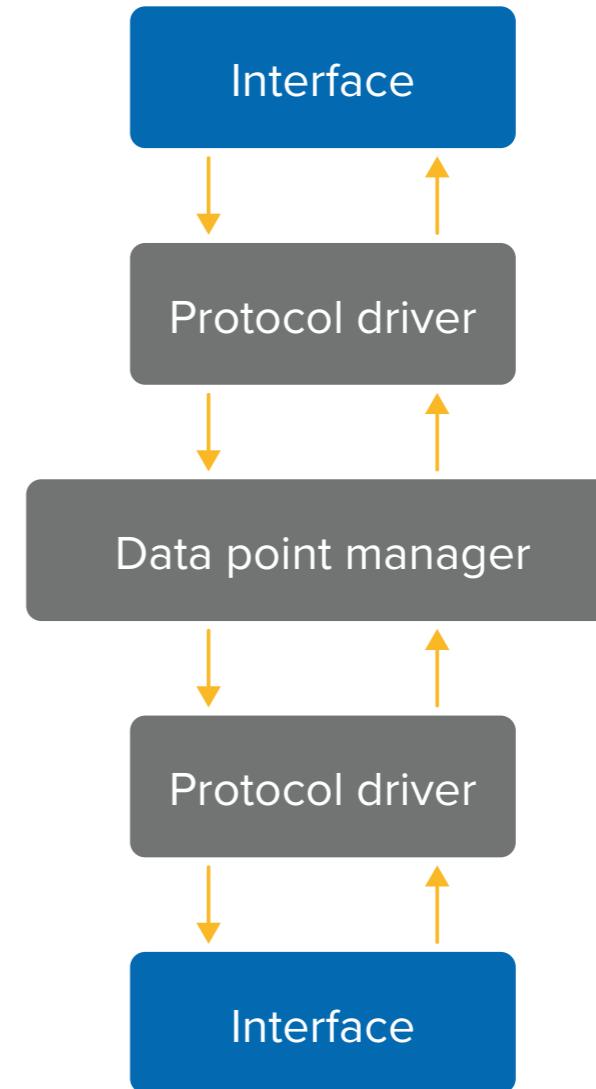
In this way, the development of a protocol driver can be used to communicate with all other protocols that have already been developed.

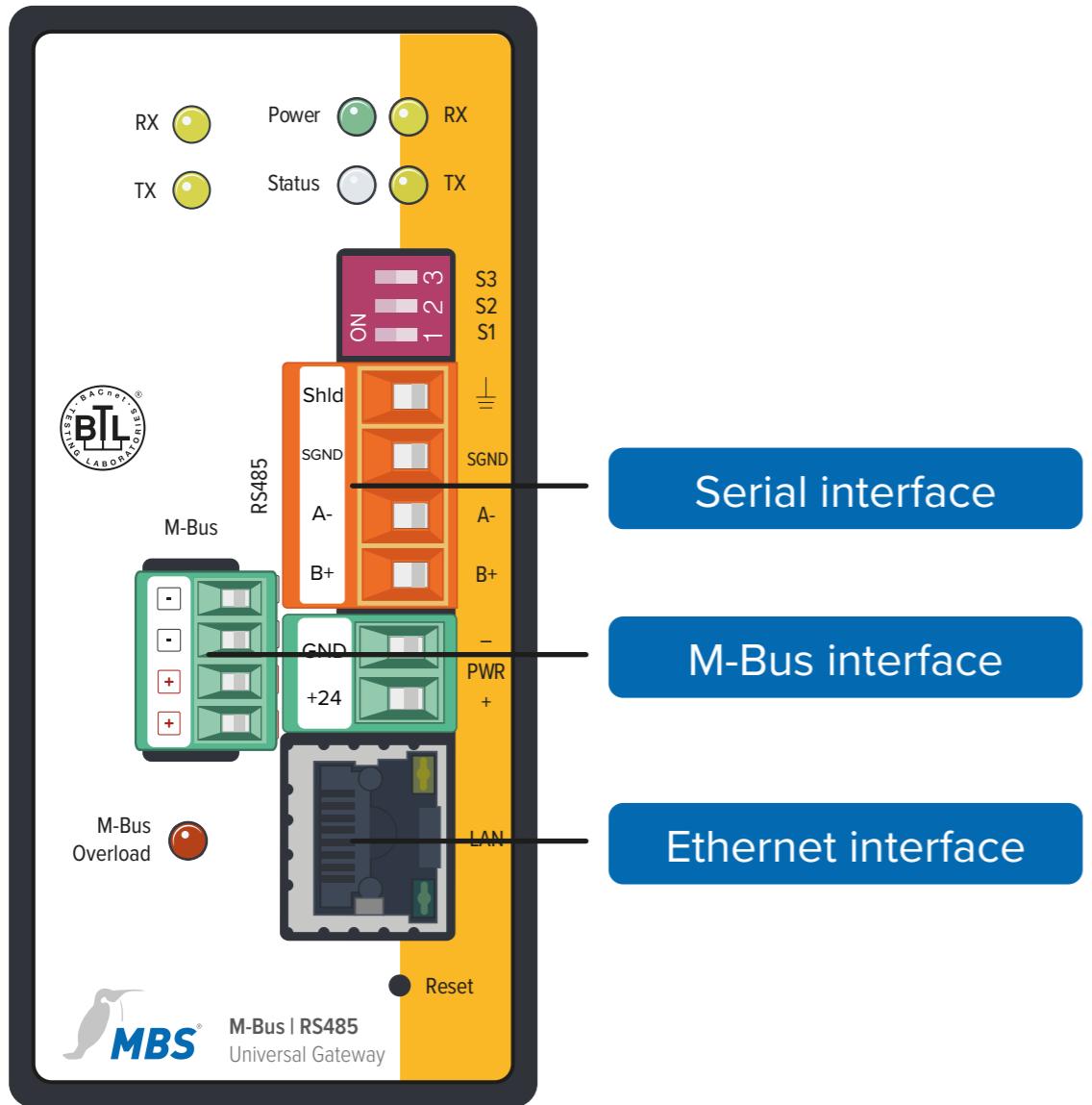


Serial interface

Ethernet interface

● Software ● Hardware





Serial interface

M-Bus interface

Ethernet interface

M-Bus  
interface

Interface

Protocol driver

Protocol driver

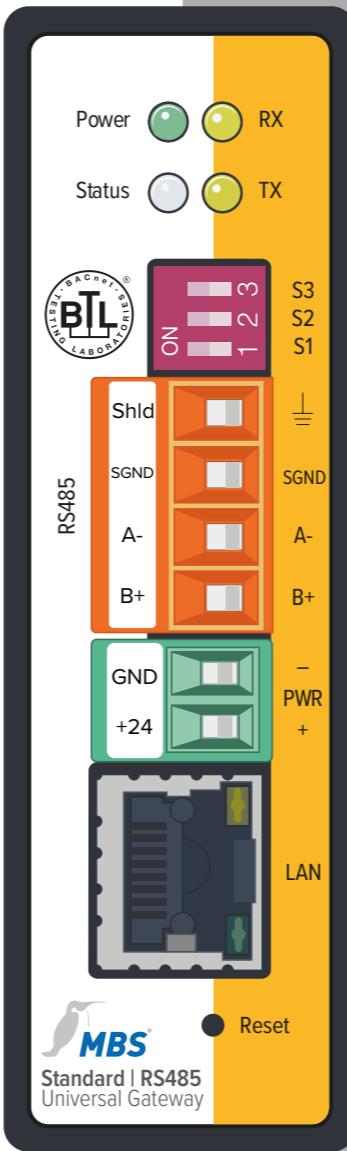
Data point manager

Protocol driver

Interface

● Software ● Hardware

## Standard Gateway



Communication to serial protocols

BACnet MSTP  
MODBUS RTU  
ESPA 4.4.4.

serial

TCP/IP

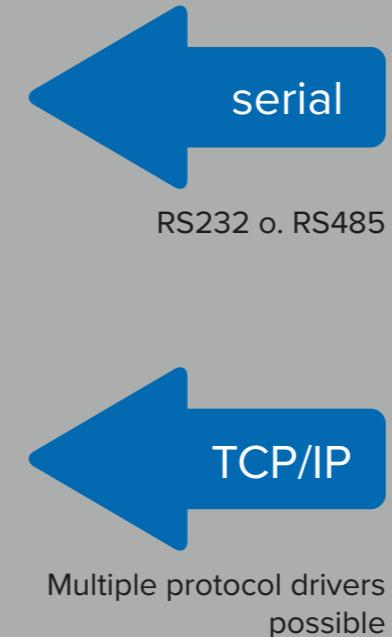
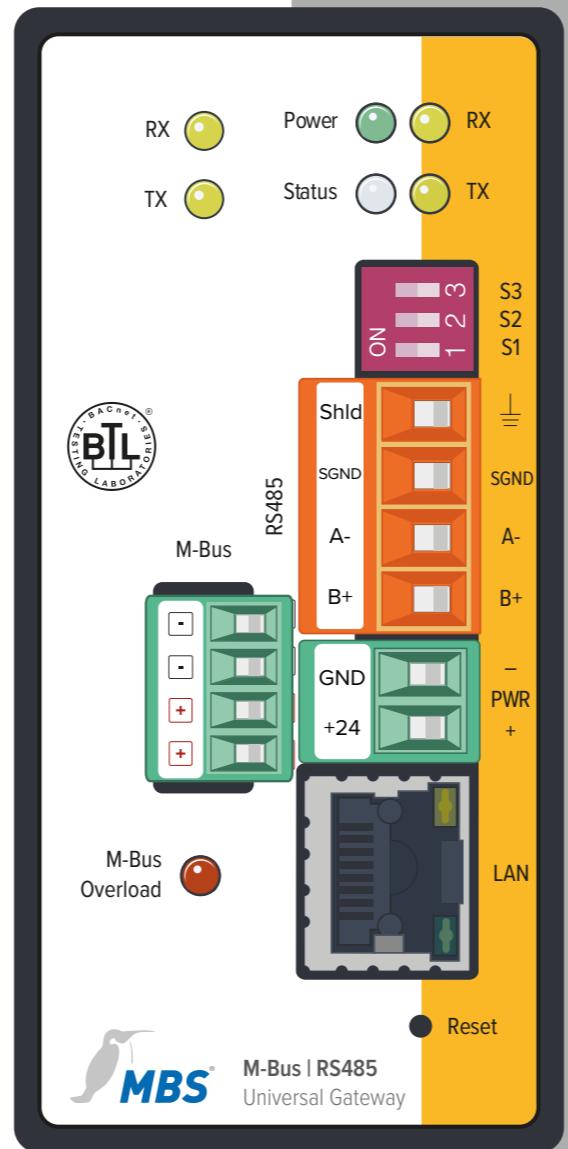
Multiple protocol drivers  
possible

BACnet IP  
IEC 60870-5-104  
MODBUS IP  
OPC Server DA 2.0  
SNMP

**M-Bus for meters**  
(water quantities, energy quantities, etc.)

M-Bus level converter

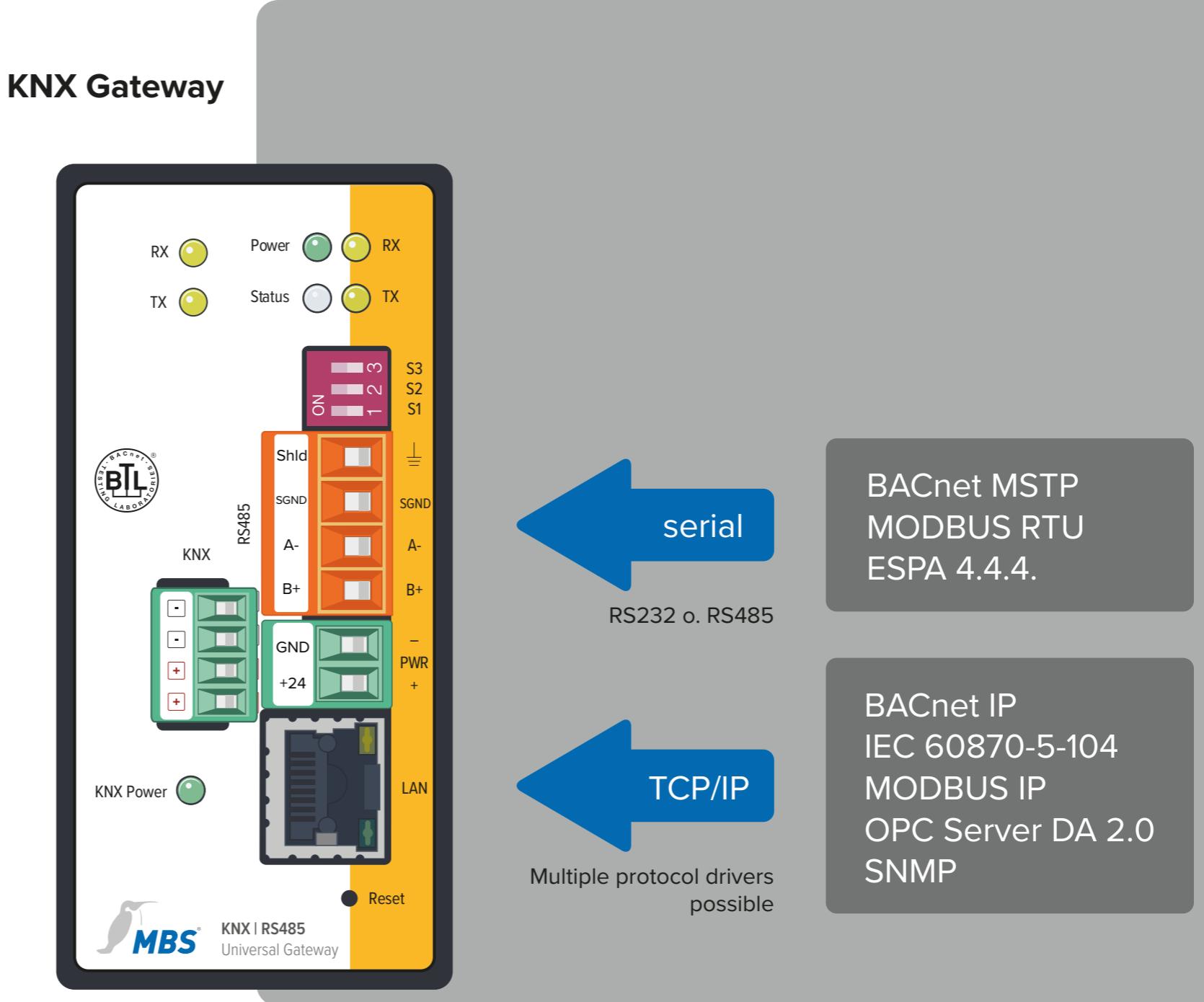
## M-Bus Gateway



BACnet MSTP  
MODBUS RTU  
ESPA 4.4.4.

BACnet IP  
IEC 60870-5-104  
MODBUS IP  
OPC Server DA 2.0  
SNMP

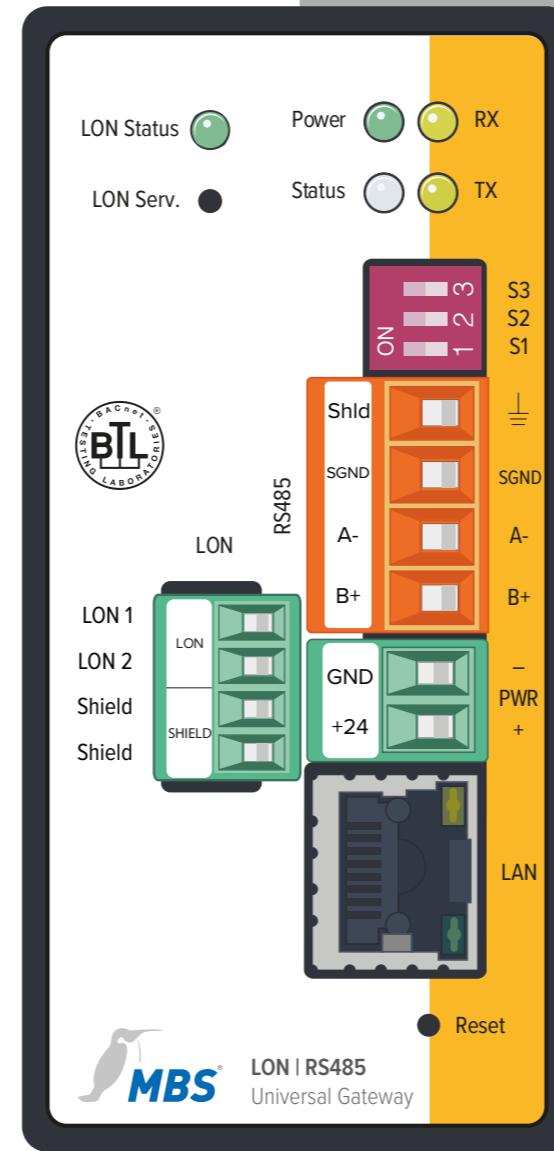
**KNX / EIB for  
building automation and control**



**LON for  
building and heating controls**



**LON Gateway**



RS232 o. RS485

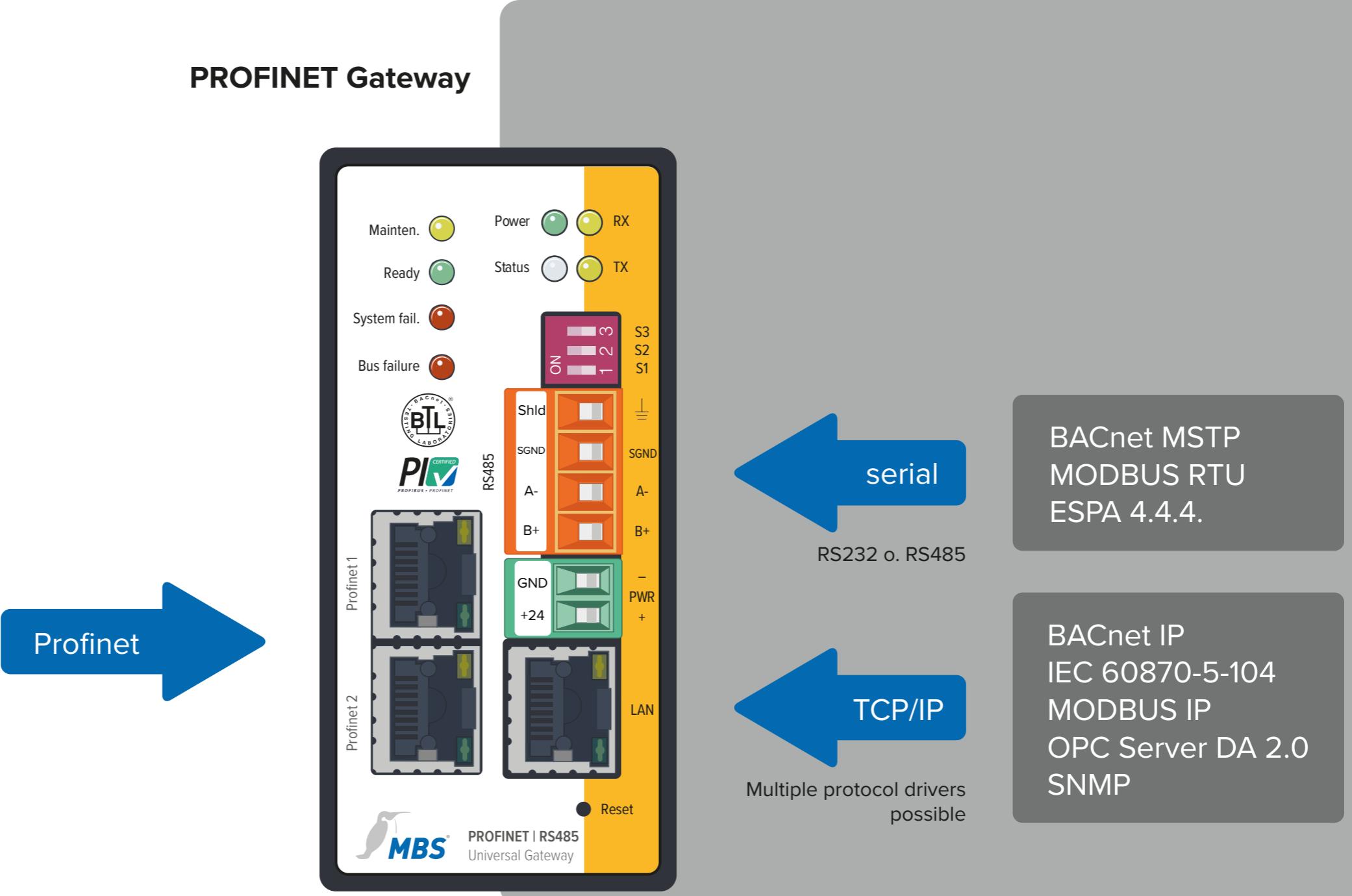


Multiple protocol drivers  
possible

BACnet MSTP  
MODBUS RTU  
ESPA 4.4.4.

BACnet IP  
IEC 60870-5-104  
MODBUS IP  
OPC Server DA 2.0  
SNMP

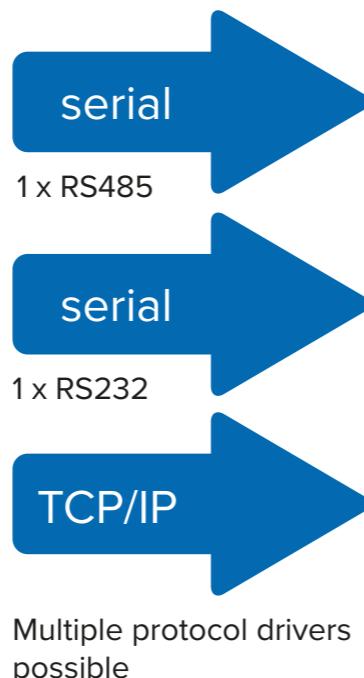
## PROFINET for industrial controls



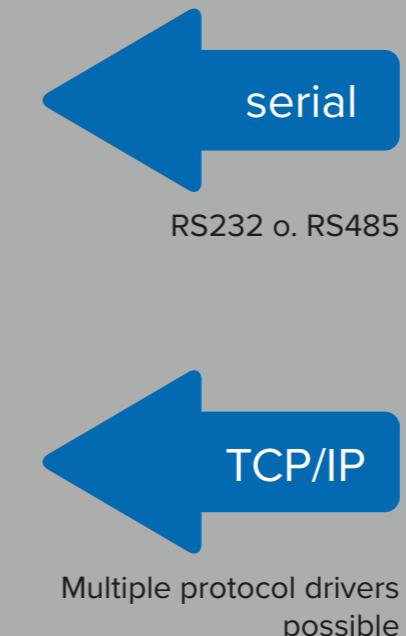
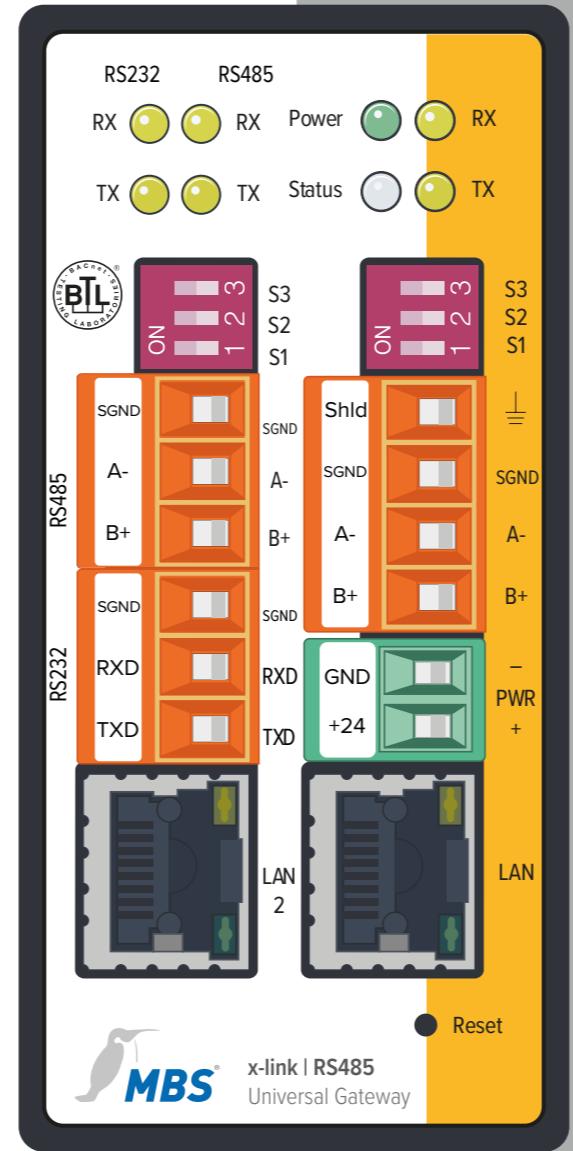
## x-Link for diverse connections

BACnet MSTP  
MODBUS RTU  
ESPA 4.4.4.

BACnet IP  
IEC 60870-5-104  
MODBUS IP  
OPC Server DA 2.0  
SNMP



x-link Gateway



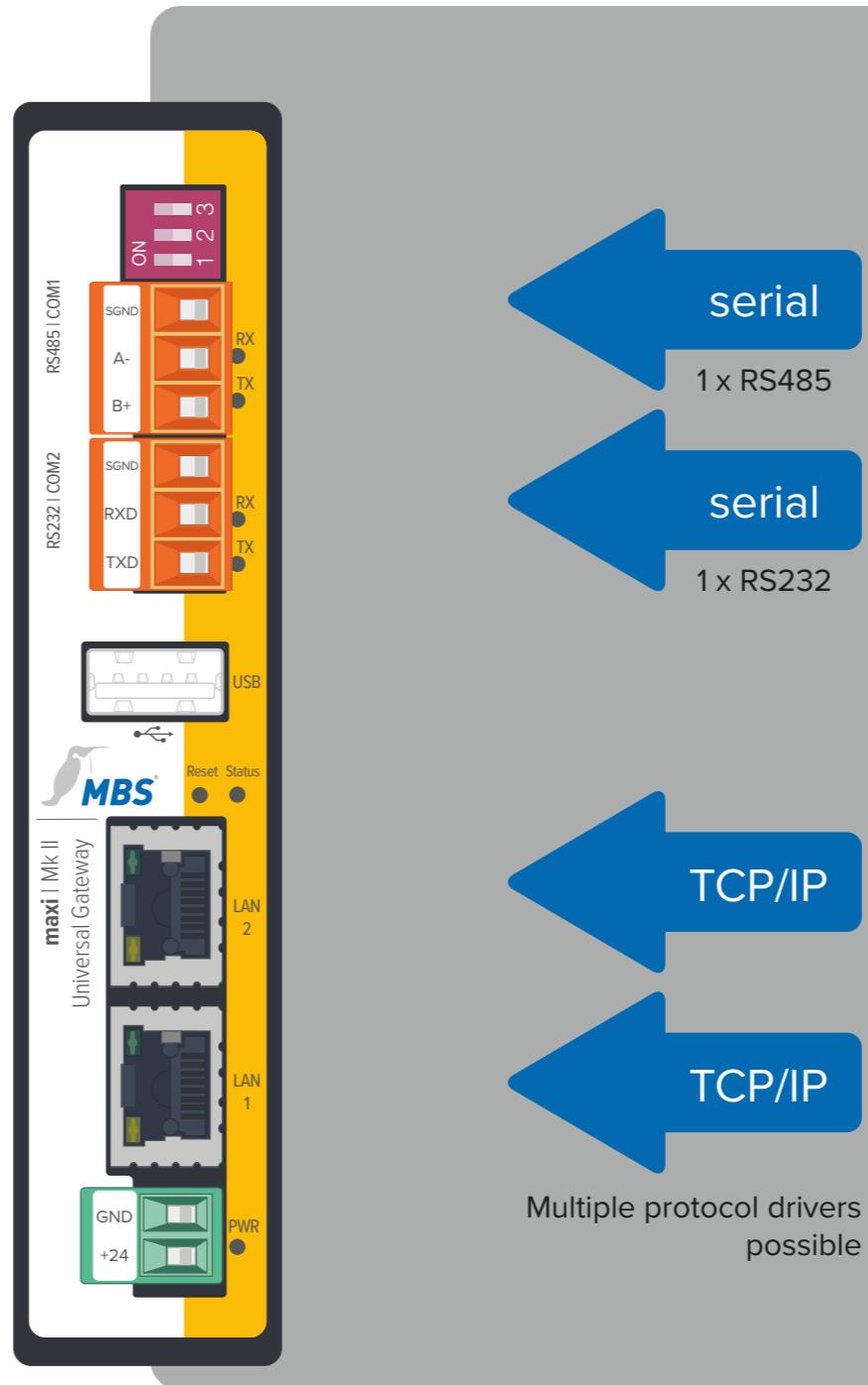
BACnet MSTP  
MODBUS RTU  
ESPA 4.4.4.

BACnet IP  
IEC 60870-5-104  
MODBUS IP  
OPC Server DA 2.0  
SNMP

## Maxi MK II Gateway



For future applications



serial

1 x RS485

serial

1 x RS232

TCP/IP

TCP/IP

Multiple protocol drivers  
possible

BACnet MS/TP  
MODBUS RTU

BACnet IP  
Modbus TCP  
OPC ...

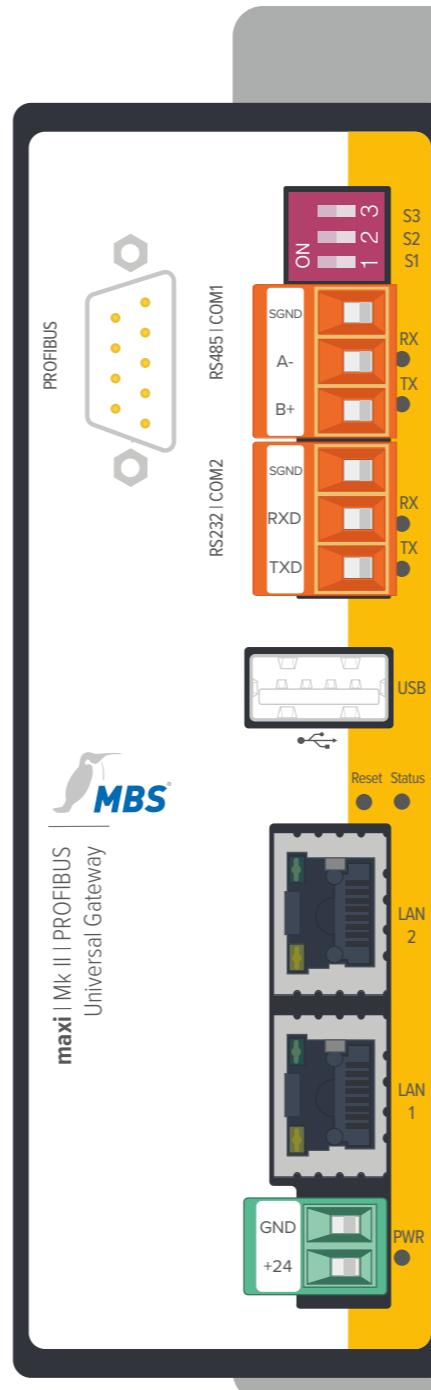
## Maxi MK II Gateway Profibus

**PROFIBUS** for  
industrial automation

PROFIBUS

USB

For future applications



serial

1 x RS485

serial

1 x RS232

TCP/IP

TCP/IP

Multiple protocol drivers  
possible

BACnet MS/TP  
MODBUS RTU

BACnet IP  
Modbus TCP  
OPC ...