

## COMTRAXX® COM461MT

BMS-Ethernet-Gateway for the connection of Bender devices with BMS capability to the Ethernet (TCP/IP) via the Modbus/TCP protocol



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COM461MT

## Device features

- Setting of the IP address, BMS address and time/date using Standard web browser
- Time synchronisation for all BMS bus devices
- Integrated Ethernet switch:  
2 x RJ45, 10/100 Mbit/s
- Can be operated on the internal BMS bus
- Modbus/TCP data access to the internal BMS bus, max. 150 BMS devices
- Commands can be sent from an external application (e.g. visualisation software) to BMS devices and measured values read.

## Approvals



## Product description

The BMS-Ethernet-Gateway COM461MT contains a Modbus/TCP server that converts BMS data for a Modbus client. A web server makes it possible to configure the COM461MT.

## Ethernet-TCP/IP interface:

The coupling is performed via the internal Layer-2 switch. Two Ethernet ports are available.

## Interface on the BMS side:

COM461MT can be operated as master or slave.

## Possible applications

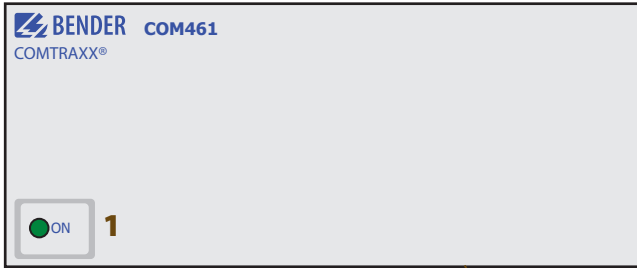
- The use of professional visualisation programs by converting the BMS data to the Modbus/TCP protocol
- Observing and analysing Bender products that support communication, such as RCMS, EDS and MEDICS® systems

## Ordering information

Supply voltage/ frequency range $U_s$	Supply voltage/ frequency range $U_s$ For UL application		Power consumption	Type	Art. No.
	AC/DC	AC			
76...276 V <sup>1)</sup> , 42...460 Hz	76...250 V, 25...60 mA, 42...460 Hz	76...250 V, 6...21 mA	≤ 6,5 VA	COM461MT	B 9506 1021

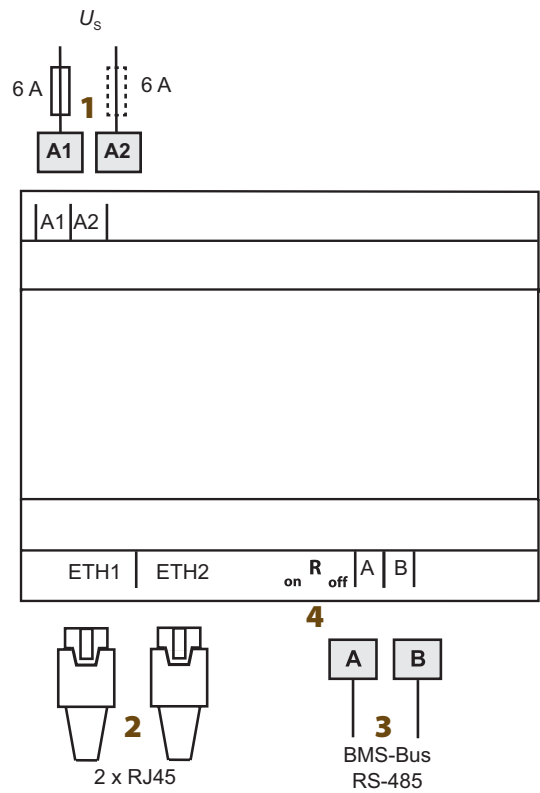
<sup>1)</sup> Absolute values

**Operating elements**



- 1 - "ON" LED lights when supply voltage is applied
- 2 - Ron/off (beside terminals A, B)  
Switch for terminating the BMS bus. When the device is installed at the end of the bus, set the terminating switch to "on".

**Wiring diagram**



- 1 - Connection to the supply voltage, 6 A fuse recommended, two-pole fuses should be used on IT systems. For UL and CSA applications, it is mandatory to use 5 A fuses.
- 2 - Two connections for connection to a personal computer or connection to the local network (hub, switch, router); Connection using a CAT5 cable; internal Layer-2-Switch with cable autodetect.
- 3 - Connection to the internal BMS bus with shielded cable (e.g. J-Y(St)Y 2x0.8)
- 4 - Switch for BMS bus termination. When the device is installed at the end of the bus, set the terminating switch to "on".

## Technical data

### Insulation coordination acc. to IEC 60664-1

Rated insulation voltage	AC 250 V
Rated impulse voltage/pollution degree	4 kV/3

### Supply voltage

Supply voltage $U_s$	see ordering information
Frequency range $U_s$	see ordering information
Power consumption	see ordering information

### LED indicators

2 x Ethernet ETH1, ETH2 act/link	lights when connected to the network, flashes during data transmission
ON	operation indicator

### Interfaces

#### BMS bus internal:

Interface/protocol	RS-485/BMS bus internal
Operating mode	master/slave (slave)*
Baud rate BMS internal	9.6 kbit/s
Cable length	≤ 1200 m
Cable (twisted pair, shielded, shield connected to PE on one side)	recommended: J-Y(St)Y 2x0.8
Connection, BMS internal	terminals A, B
Terminating resistor	120 Ω (0.25 W)
Device address, BMS bus internal	1...99 (2)*

#### Ethernet:

Connection	2 x RJ45
Data rate	10/100 Mbit/s, autodetect
IP address	nnn.nnn.nnn.nnn (192.168.0.254)*
Netmask	nnn.nnn.nnn.nnn (255.255.0.0)*
Protocols	TCP/IP, Modbus/TCP, NTP

### Environment/EMC

EMC	EN 61326-1
Classification of climatic conditions acc. to IEC 60721:	
Stationary use	3K5
Transport	2K3
Long-term storage	1K4
Operating temperature	-10...+55 °C
Classification of mechanical conditions acc. to IEC 60721:	
Stationary use	3M4
Transport	2M2
Long-term storage	1M3

### Connection

Connection	screw-type terminals
Connection properties:	
Rigid/flexible	0.2...4/0.2...2.5 mm <sup>2</sup> (AWG 24...12)
Multi-conductor connection (2 conductors with the same cross section):	
rigid/flexible	0.2...1.5 0.2...1.5 mm <sup>2</sup>
Stripping length	8...9 mm
Tightening torque	0.5...0.6 Nm

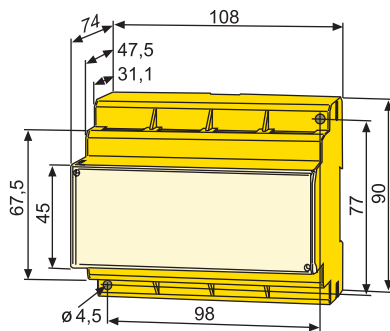
### Other

Operating mode	continuous operation
Mounting	display oriented
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
Type of enclosure	X460
Screw mounting	2 x M4
DIN rail mounting acc. to	IEC 60715
Flammability class	UL94V-0
Software version	D402 V1.0x
Weight	≤ 310 g

( )\* = factory setting

## Dimension diagram XM460

Dimensions in mm



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