

BACnet/IP and BACnet/SC Router – Data Security with Secure Connect



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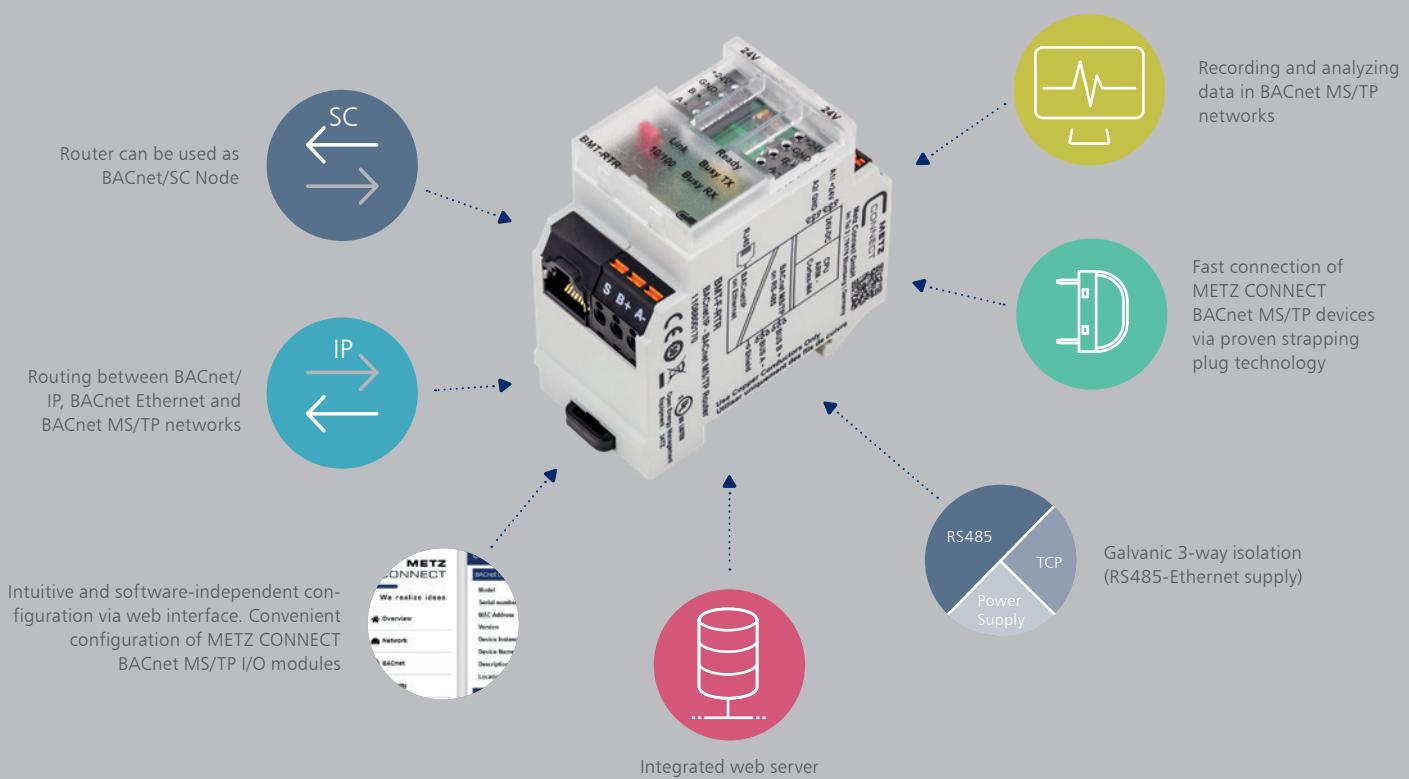


BACnet/IP and BACnet/SC Router – Data Security with Secure Connect

Due to the rapid growth of IT networking of technical equipment in buildings (heating/ventilation/air conditioning (HVAC), lighting, shading, access, etc.) in building automation and the connection of building management systems (BMS) to the cloud, there is a growing risk of falling victim to hacker attacks. This can not only result in damage due to access to sensitive data, but can also cause considerable damage directly to the

building or the installed equipment (HVAC systems, machines). System-relevant and critical infrastructural buildings (railroad stations, airports, hospitals, etc.) can come to a standstill and companies can suffer considerable economic damage. It is, therefore, all the more important to protect networked buildings and building automation systems against attacks.

Features



Product overview



Type	BMT-RTR/SC	BMT-F-RTR/SC	BMT-RTR	BMT-F-RTR
P/N	11088101	1108810170	11088001	1108800170
BACnet/SC	x	x	-	-
BACnet/IP	x	x	x	x
BACnet MS/TP	x	x	x	x
BACnet/SC Node	x	x	-	-
Routing BACnet MS/TP ↔ BACnet/IP	x	x	x	x
Routing BACnet MS/TP ↔ BACnet/SC	x	x	-	-
Routing BACnet/IP ↔ BACnet/SC	x	x	-	-

Accessories to network components



P/N	110561	11056170	110195	1308450577-E	130B117003-E	130E405032-E
Type	NG4	NG4-F	EDS-205	RJ45 patch cable	REGplus IP20 C6A modul 180°M	C6A RJ45 field plug pro
Description	Power supply unit 24 V DC	Power supply unit 24 V DC	5-Port Switch with 10/100 BaseT(X) RJ45	Patch cord Cat.6A AWG 26 0.5 m yellow	RJ45 Termination unit for mounting to DIN rail	RJ45 plug for field assembly



Other network components can be found on our website
www.metz-connect.com

BACnet Router and BACnet Router/SC

With the METZ CONNECT BACnet routers BMT-(F)-RTR, BACnet MS/TP devices are connected to a BACnet/IP network.

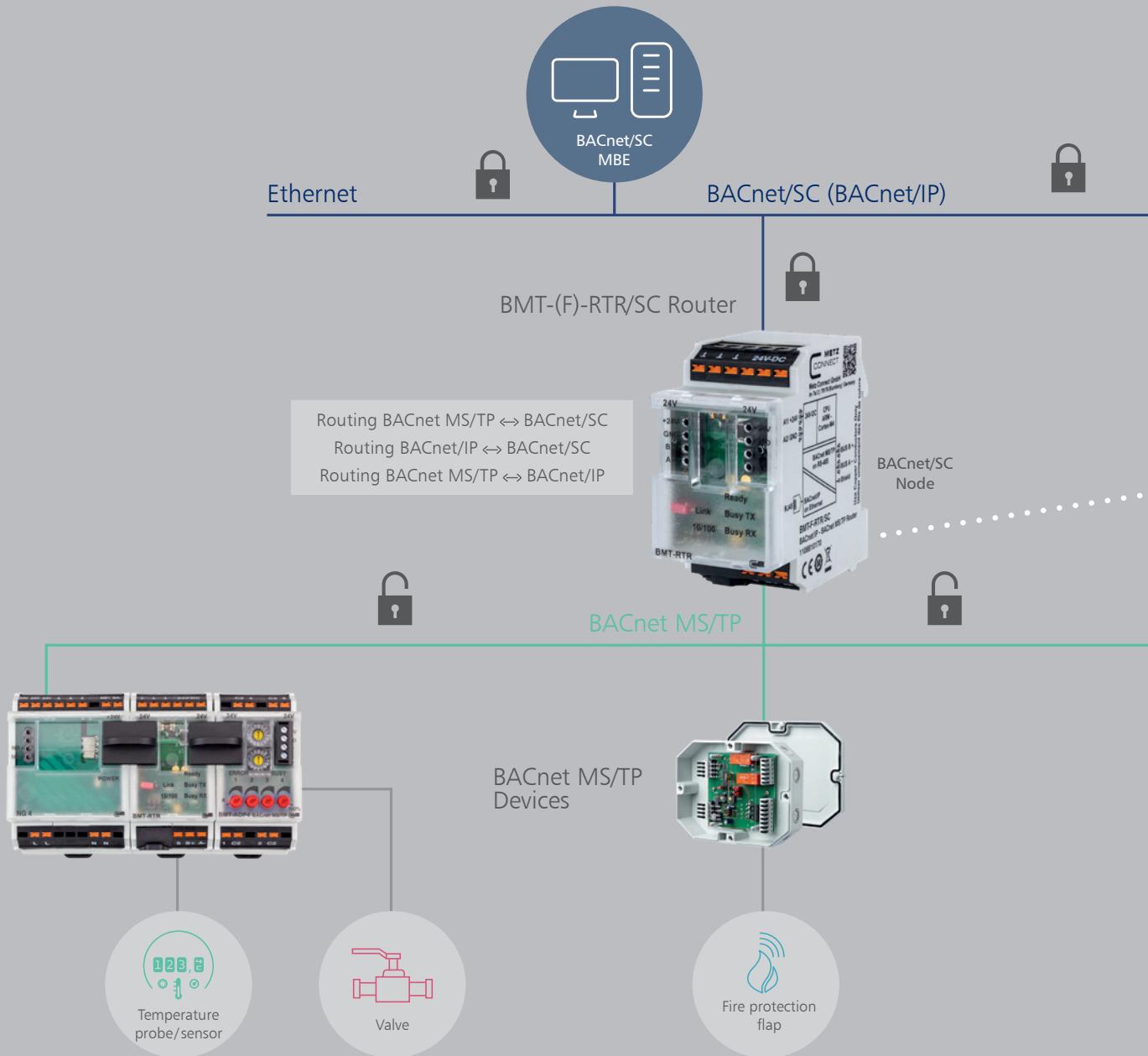
The BACnet/SC (Secure Connect) router BMT-(F)-RTR/SC is the right solution for secure, encrypted data transmission in critical infrastructures. BACnet/SC is the standard for secure data transmission using the BACnet protocol.

A BACnet/SC hub is used to manage the data communication of individual BACnet/SC nodes, such as the BMT-(F)-RTR/SC router.

As an additional safeguard, another so-called BACnet/SC failover hub can be used to take over if the hub fails.

This means that existing IT infrastructures and the Internet can also be used for data transfer. The BACnet routers have an integrated web server for configuring and parameterizing the device-specific functions. Particularly noteworthy is the flexibility of the BACnet/SC router BMT(F)-RTR/SC.

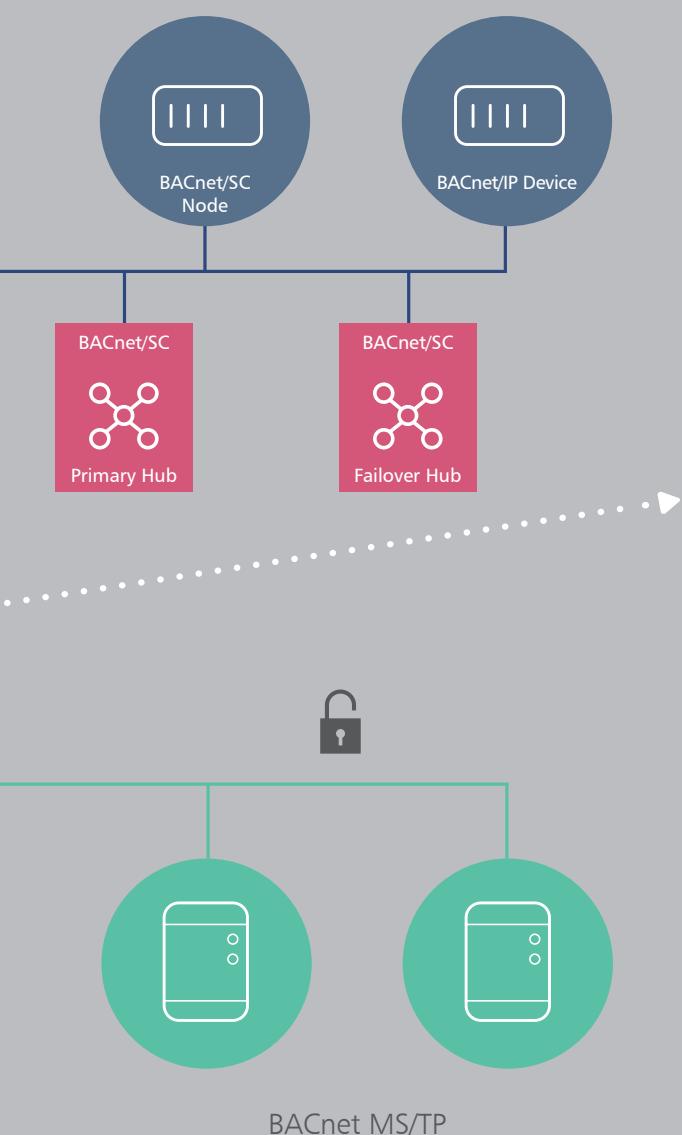
System overview



MS/TP, BACnet/IP, and BACnet/SC networks can be connected and routed simultaneously. Routing from MS/TP to BACnet/IP can be extended to BACnet/SC anytime. This means you can prepare your systems for the future today and create investment security. Secure your building automation with METZ CONNECT BACnet routers! The rapid growth of IT networking poses risks for sensitive data and the physical security of buildings.

The BMT-(F)-RTR/SC series seamlessly connects BACnet MS/TP devices to BACnet/IP and BACnet/SC networks.

Discover the innovation that protects your buildings from hacker attacks while being prepared for future developments. METZ CONNECT – your partner for secure building automation.



METZ CONNECT
We realize ideas

Overview

Network

BACnet

Security

Monitoring

MS/TP Capture

Maintenance

English

Overview

BACnet Device

Model	BMT-RTR/SC
Serial number	00000000
MAC Address	00:04:A3:F1:00:04
Version	2.0
Device Instance ID	421000
Device Name	BMT-RTR_00
Description	
Location	

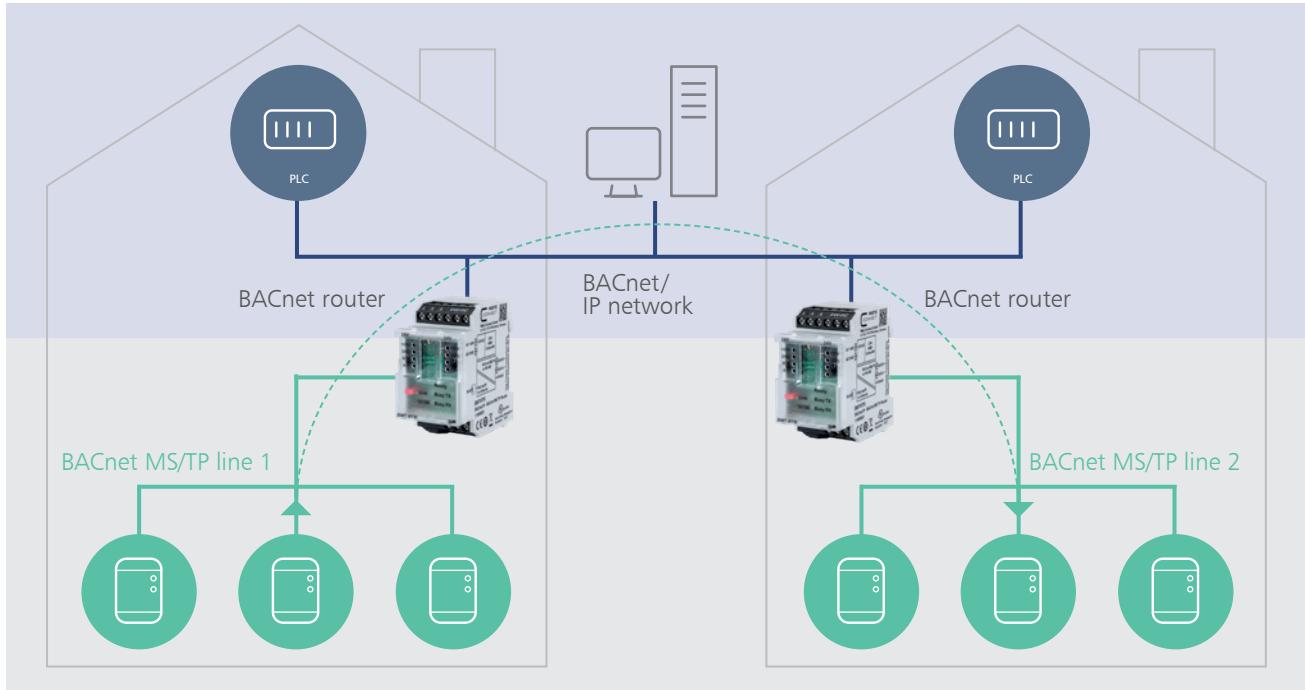
Network

Link	100MBit Full duplex
Host Name	BMT-RTR-f10004

IPv4

IPv4	On
DHCP	On
IP Address	10.10.6.40
Subnet Mask	255.255.255.0
Standard Gateway	10.10.6.254
DNS Server	10.10.0.2

Application example



With the BACnet IP routers, communication between two BACnet MS/TP networks (Master – Master, Master – Slave) can be established via the IP network.

Simple configuration through web interface



Intuitive menu navigation and operation by smartphone, tablet or notebook through responsive design



Logging and analysis of IP and RS485 communication



Simple device search of METZ CONNECT BACnet MS/TP devices on the RS-485 bus

Your benefits



- Connection of 32 BACnet MS/TP devices per line
- Simple integration of BACnet MS/TP devices in a BACnet/IP network
- Ethernet available everywhere in the building
- No restriction on cable lengths
- Reliable and fast communication between automation and field equipment
- Technology and manufacturer-independent

- Only for the BMT-(F)-RTR/SC variants:
 - Secure and encrypted building automation systems with BACnet/SC
 - Routing from BACnet/IP and BACnet MS/TP to BACnet/SC

BACnet MS/TP I/O fieldbus modules

				
BMT-DI4 BMT-F-DI4	BMT-DI10 BMT-F-DI10	BMT-SI4 BMT-F-SI4	BMT-AI8 BMT-F-AI8	BMT-CI4 BMT-F-CI4
 1108841319  110884131970	 1108811319  110881131970	 11088913  1108891370	 11088213  1108821370	 1108901332  110890133270
4 digital input	10 digital input	4 SO-input	8 configurable temperature or voltage inputs	4 current inputs 0-20 mA, 4 voltage inputs 0-10 V
				
BMT-DO4 BMT-F-DO4	BMT-TO4 BMT-F-TO4	BMT-AOP4 BMT-F-AOP4	BMT-AO4 BMT-F-AO4	BMT-DIO4/2 BMT-F-DIO4/2
 1108861321  110886132170	 11088013  1108801370	 1108871302  110887130270	 1108851302  110885130270	 1108831326  110883132670
4 relay outputs, manual control level	4 triac outputs, manual control level	4 voltage outputs 0-10 V, manual control level	4 voltage outputs 0-10 V	4 digital inputs, 2 relay outputs, changeover contact, manual operation level
				
BMT-TP BMT-F-TP	BMT-Multi I/O	BMT-DIO4/2-IP65 BACnet MS/TP	BMT-DIO4/2-IP65 BACnet MS/TP 230 V	BMT-DI4-IP65 BACnet MS/TP
 11088813  1108881370	P/N 11089313	P/N 108831326IP	P/N 1108830526IP	P/N 1108841319IP
6 digital input, 2 two-stage relay outputs, manual control level	> 4 digital outputs (Photo MOS) > 4 digital outputs (Relais) > 11 Digital inputs > 6 universal inputs (temperature/voltage) > 1 analog input (current) > 2 analog outputs (voltage) > 1 SO input	4 digital inputs, 2 relay outputs, changeover contact, manual operation level	4 digital inputs, 2 relay outputs, changeover contact, manual operation level	4 digital inputs
				
MB-DIO 2/1-IP65 24 V	MB-DIO 4/2-IP65 24 V	MB-DIO 2/1-IP65 230 V	MB-DIO 4/2-IP65 230 V	
P/N 1108111326IP	P/N 1108121326IP	P/N 1108110526IP	P/N 1108120526IP	
2 digital inputs, 1 relay output, changeover contact, manual operation level	4 digital inputs, 2 relay outputs, changeover contact, manual operation level	2 digital inputs, 1 relay output, changeover contact, manual operation level	4 digital inputs, 2 relay outputs, changeover contact, manual operation level	

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