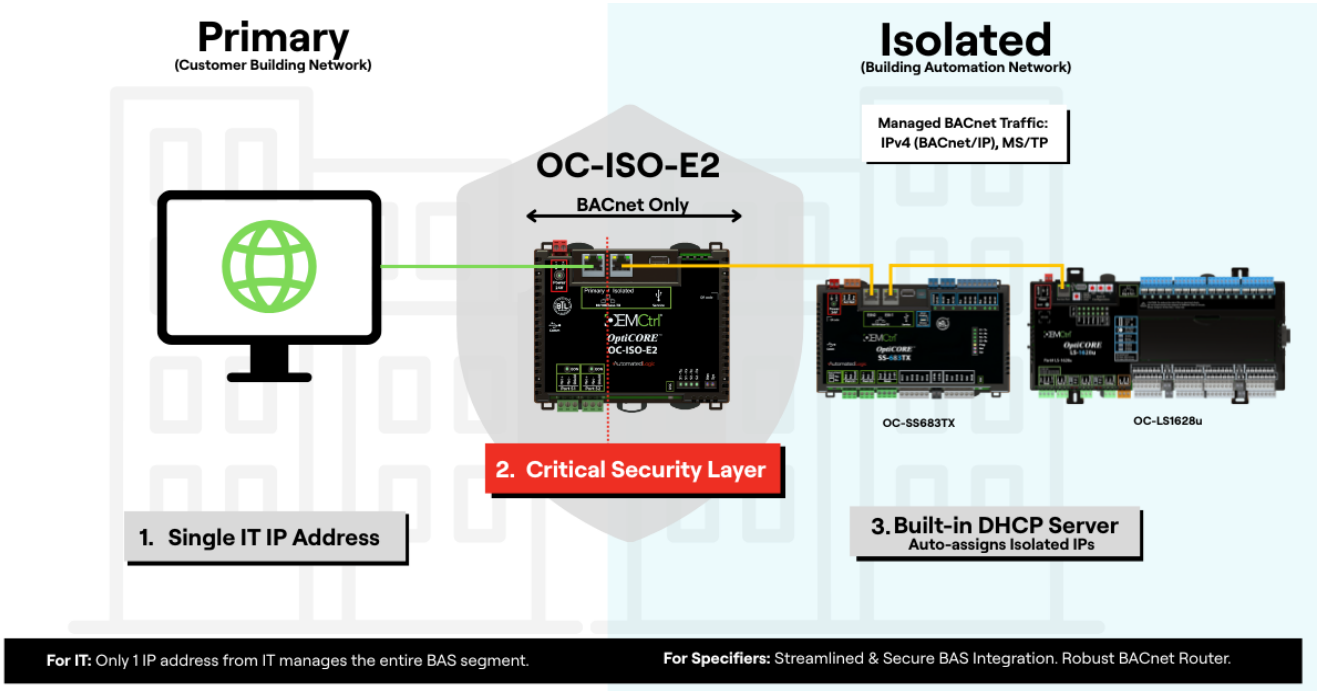
OPTICORE™ ISOLATED NETWORK ROUTER

The OptiCORE Isolated Network Router is the essential router that connects diverse BACnet networks (IP, Ethernet, BACnet Secure Connect, and MS/TP). It provides a critical security layer, isolating your building automation network from external IP traffic. This ensures reliable BACnet communication and enhances security, reducing IT complexity and providing a robust foundation for your building automation system.

FEATURES/BENEFITS

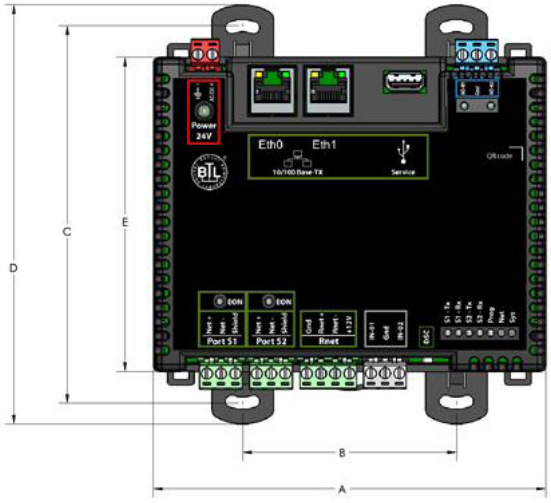
- **Enhanced Network Security:** Isolates the building automation network from the broader customer network, creating a robust security layer (firewall) designed to significantly reduce the risk of unauthorized access and mitigate various cyber threats.
- **IT Friendly:** Only one IP address required to connect to all the devices on the isolated network.
- **Streamlined Deployment:** Includes a built-in DHCP server that automatically assigns isolated IP addresses, simplifying network configuration and reducing installation time.
- **Robust Routing Capability:** Seamlessly integrate your system by routing BACnet across all common network types, including IP, Ethernet, BACnet Secure Connect (SC), and MS/TP, ensuring compatibility with both existing and future infrastructure.
- **Flexible Network Connections:** Includes 1 primary Ethernet port for IP/Ethernet/SC , 1 isolated Ethernet port for BACnet/IP, and 2 EIA-485 ports (both for BACnet MS/TP only).
- **Easy Configuration and Recovery:** A dedicated USB port for system setup.
- **Advanced Diagnostics:** Captures network data and statistics for efficient troubleshooting and optimizing system performance.
- **Optimized Broadcast Communication:** Functions as a BACnet Broadcast Management Device (BBMD) to manage broadcast communication efficiently on BACnet/IP networks, reducing traffic, and improving response times.
- **Simplified BACnet Device Integration:** Supports Foreign Device Registration (FDR), enabling automatic discovery and registration of third-party BACnet devices to streamline communication within the BACnet network.
- **Compact Footprint:** Designed for easy installation, optimizing control panel space.



1025 Cobb Place Boulevard, Kennesaw, GA 30144 | 770-429-3060 | oemctrl.com

Specifications

BACnet Conformance	Conforms to the BACnet Router (B-RTR) and BACnet Broadcast Management Device (B-BBMD) profiles as defined in Annex L of the BACnet standard. The device is certified to the BACnet standard ISO 16484-5 protocol revision 1.19 and protocol revision 19 (135-2016). Please see BTL listing page https://www.bacnetinternational.net/btl/index.php?m=47 for details.
Power	24 Vac ± 10%, 50-60 Hz, 50 VA 24 Vdc ± 10%, 18 W
Communication Ports	**Primary Port:** 10/100 BaseT, full duplex, Ethernet ports for BACnet/IP, BACnet/IPv6, BACnet/Ethernet, BACnet/SC communication. **Isolated Port:** 10/100 Mbps BaseT, full duplex, Ethernet port for BACnet/IP **Port S1:** High-speed EIA-485 port for communication with BACnet MS/TP network at 9,600 to 115,200 bps **Port S2:** High-speed EIA-485 port for communication with a BACnet MS/TP network at 9,600 to 115,200 bps. End of Net termination can be set to Yes to terminate the network segment. **Service port:** USB 2.0 port for setting up the router and troubleshooting through a local connection to a computer, connecting to the OptiPoint interface, or a wireless service adapter.
Environmental Operating Range	-40 to 158°F (-40 to 70°C), 10–95% relative humidity, non-condensing. The OC-ISO-E2 can be installed both inside and outside the building envelope. It should be placed in a UL listed enclosure. If installed outside, the enclosure must be suitable for the environmental conditions.
Memory	8 GBs eMMC Flash memory (120 MB available for use) and 512 MB DDR3 RAM. User data is archived to non-volatile Flash memory when parameters are changed, every 90 seconds, and when the firmware is deliberately restarted.
Real Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 3 days.
LED Status Indicators	Tricolor **NET** LED to show network status / Tricolor **SYS** LED to show system status/**POWER** LED/**S1 EON** LED/**S2 EON** LED/A **TX** (Transmit) and **RX** (Receive) LED for: Port S1 and Port S2
Compliance/Listing	**United States:** FCC compliant to Title CFR47, Part 15, Subpart B, Class A. UL Listed, File E143900; CCN PAZX, UL916, Energy Management Equipment; UL Listed to UL864: Smoke Control System. **AS/NZS:** RCM Mark 61000-6-3; **Canada:** UL Listed File E143900, CCN PAZX7, CAN/CSA C22.2 No. 205 Signal Equip., Industry Canada Compliant, ICES-003, Class A; UL Listed to ULC-S527: Smoke Control System. **Europe/UKCA:** CEN50491-5-2:2009; Part 5-2: Compliant with Electromagnetic Compatibility Regulations - Gov. UK and RoHS for Electrical and Electronic Equipment 2012 RoHS Compliant: 2015/863/EU REACH Compliant
Protection	Device is protected by a replaceable, fast acting, 250 Vac, 3A, 5mm x 20mm glass fuse. The power and network ports comply with the EMC requirements EN50491-5-2.
Enclosure	Fire-retardant plastic ABS, UL94-5VA
Mounting	35mm DIN rail mounting or screw mounting
Dimensions	**Overall** **A:** 5.51 in. (14 cm) **D:** 5.88 in (14.93 cm) **E:** 4.41 in (11.20 cm) **Depth:** 2.01 in. (5.11 cm) **Weight:** .75 lbs. (.3402 kg) **Screw Mounting** **B:** 3.00 in. (7.62 cm) **C:** 5.29 in. (13.44 cm)



All trademarks and service marks referred herein are the property of their respective owners.

A Carrier Company
©2025 Carrier. All Rights Reserved.

1025 Cobb Place Boulevard, Kennesaw, GA 30144
770-429-3060 | oemctrl.com