

System Managers

DSM-RTR

Description

The DSM-RTR is a fully programmable, Native BACnet™ Building Controller designed for BACnet routing applications. BACnet routers are devices that connect two or more networks to form a larger BACnet network.

The DSM-RTR is capable of connecting BACnet networks that communicate on Twisted-Pair Ethernet 10-BaseT using BACnet IP and BACnet over Ethernet, or on an RS-485 LAN using the BACnet MS/TP protocol and RS-232 using BACnet PTP protocol.



Application

The DSM-RTR is ideal for any of the following uses:

- Connect a BACnet site to the Internet
- Connect Ethernet networks to form a Wide Area Network (WAN) Intranet
- Connect BACnet MS/TP networks to a backbone Ethernet network

Features

- Native BACnet firmware
- BACnet IP
- BACnet over Ethernet capability
- BACnet MS/TP communications
- BACnet PTP
- Integrated housing
- Fully programmable in GCL+
- Application database can be flash loaded over the network
- Controller firmware stored in flash memory (can be network loaded)
- Modbus capability pre-loaded in specific models
- Supports modbus capability by flash loading in the field via hardware key

Specifications

BACnet Device Profile

BACnet Building Controller (B-BC)

Technology

32-bit processor

2 MB (16 megabit) Flash memory

512 KB SRAM memory

Real-time clock with lithium battery & SRAM backup

LED indication of CPU and SCAN status

Device Type

Configured as either an Area or System device

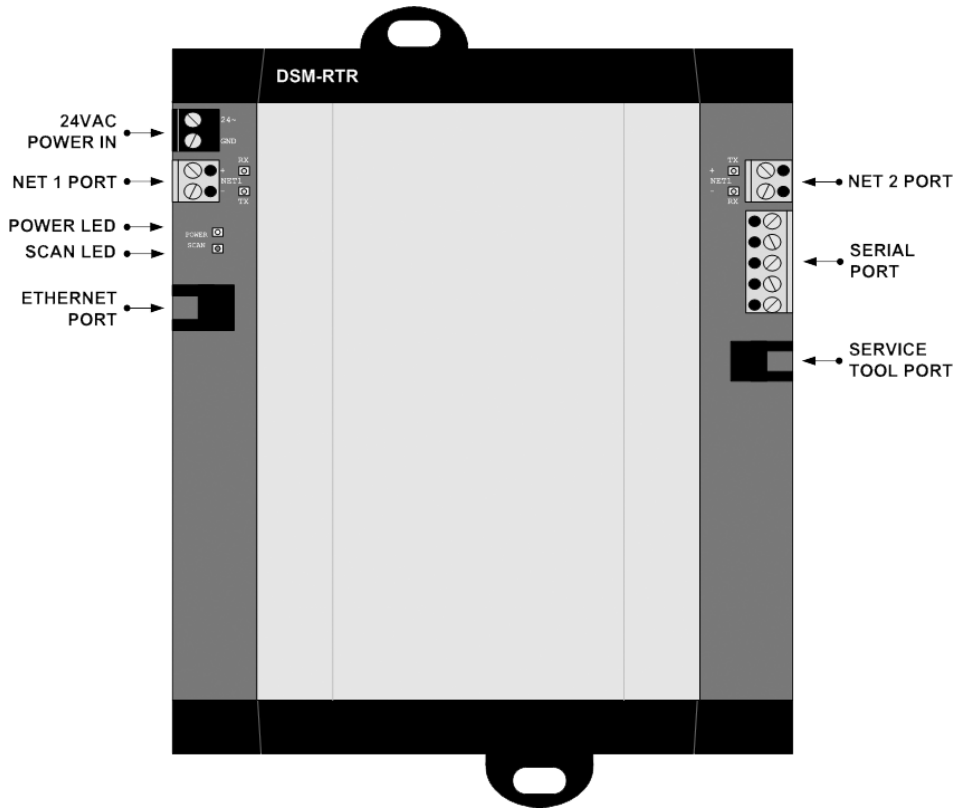
Device Addressing

Set via DIP switch and jumpers or software setup

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DSM-RTR: Board Layout Diagram



Specifications (Continued)

Communication Ports

Twisted-Pair Ethernet
(10-BaseT) @ 10 MB, BACnet IP, BACnet over Ethernet

Main LAN (NET1)
BACnet MS/TP @ 9600, 19200, 38400 or 76800 bps (default) (maximum of 99 devices per BACnet MS/TP segment)

SubLAN (NET2)
BACnet MS/TP (maximum 99 devices)

Serial RS-232 BACnet PTP, 9600, 19200 or 38400 bps

Connectors

Removable screw-type terminal connectors

Wiring Class

Class 2

Power

24 VAC with LED status indication

10 VA

Ambient

32° to 131°F (0° to 55°C)

10 - 90% RH (non-condensing)

Dimensions

5.75 x 8.25 x 2.25 in. (14.6 x 21 x 5.6 cm) with housing

0.75 lb. (342 g) with housing

Compliance

CE

FCC

Listings

UL 916 Listed

BTL Listed

Accessories

RPT-768—Delta Network Repeater for BACnet MS/TP

TRM-768—Delta Network Terminator for BACnet MS/TP

CON-768—Delta Network Converter

DFF099-KEY—Flash Loader Firmware Key with 50 credits loaded

DFF099-CDT—Flash Loader Credits, additional credits ordered in blocks of 50

Ordering

Order the DSM-RTR according to the following product numbers:

DSM-RTR—Router, Ethernet I/P, BACnet MS/TP, PTP Router

DSM-RTR-MOD30—Router, Ethernet I/P, BACnet MS/TP, PTP Router for up to 30 Modbus devices