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
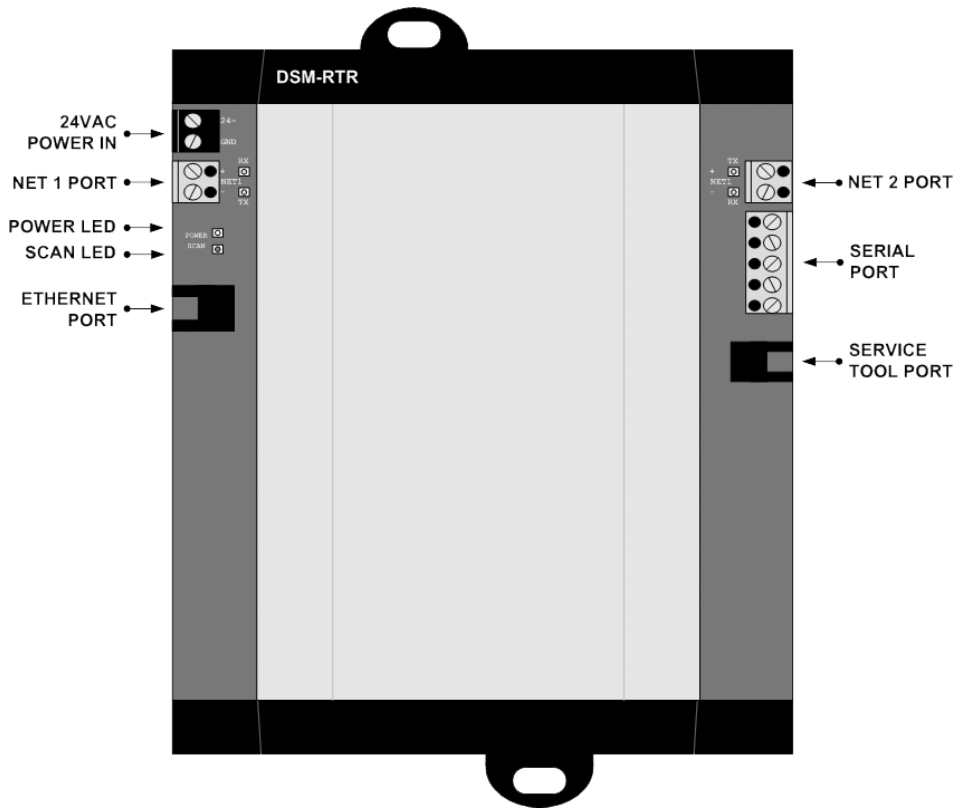
LED indication of CPU and SCAN status

Device Type
Configured as either an Area or System device

Device Addressing
Set via DIP switch and jumpers or software setup

Do it right.

System Managers
DSM-RTR: Board Layout Diagram

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

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

DZNR-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