

▶ Red5

Red5-EDGE-ROOM

Description

The Red5-EDGE-ROOM is a fully programmable native BACnet® building controller. As a primary integration engine of the Red5 system, the Red5-EDGE-ROOM contains memory storage and external communication ports, as well as the control logic for the expansion modules. The Red5-EDGE-ROOM can support up to 4 expansion modules.

The Red5-EDGE-ROOM supports multiple communication methods, including BACnet/IP, BACnet over Ethernet, BACnet MS/TP and Delta LINKnet.



Application

The Red5 system is a complete solution that combines HVAC, access control and lighting control in a modular system. It combines multiple protocols and I/O points in one unit.

The Red5 system improves room control, avoids duplicate devices and offers a satisfying occupant experience at a lower energy cost.

The Red5-EDGE-ROOM single room controller is ideal for cost-sensitive applications where core features and single serial port connectivity are required.

Features

- ▶ Fully programmable
- ▶ BACnet/IP, BACnet over Ethernet and BACnet MS/TP communication ports
- ▶ Dual Ethernet ports
- ▶ Modular, expandable I/O. Modular design provides flexibility, ease of service and reduces cost of future upgrades.
- ▶ Fault detection and diagnostics
- ▶ Firmware upgrade and database load/save over the network
- ▶ LED indicators for device status, NET and Ethernet ports
- ▶ USB expansion ports
- ▶ DIN rail mountable (EN 50022-35x7.5)

Specifications

BACnet Device Profile

BACnet Building Controller (B-BC)

Device Addressing

Software addressed

Connectors

Removable screw-type terminal connectors

Wiring Class

Class 2 / SELV

Power

24 VDC, 2 W typical (7 W max)

24 VDC, 100 W max output fully loaded

Power Out

75 W max

Technology

Arm® Cortex®-A8

32-bit 600 MHz RISC CPU

256 MB DDR3L RAM

4 GB eMMC flash memory

Real-time clock

Supercapacitor power backup for RTC and CPU

Communication Ports

2 Ethernet (10/100-Base T)

BACnet/IP, BACnet over Ethernet, BACnet/SC*

1 RS-485 port supporting up to 4 devices with the following protocols:

BACnet MS/TP up to 76800 bps

Delta LINKnet up to 76800 bps

Modbus RTU up to 115200 bps

1 CAN bus port supporting up to 2 O3-HUB devices

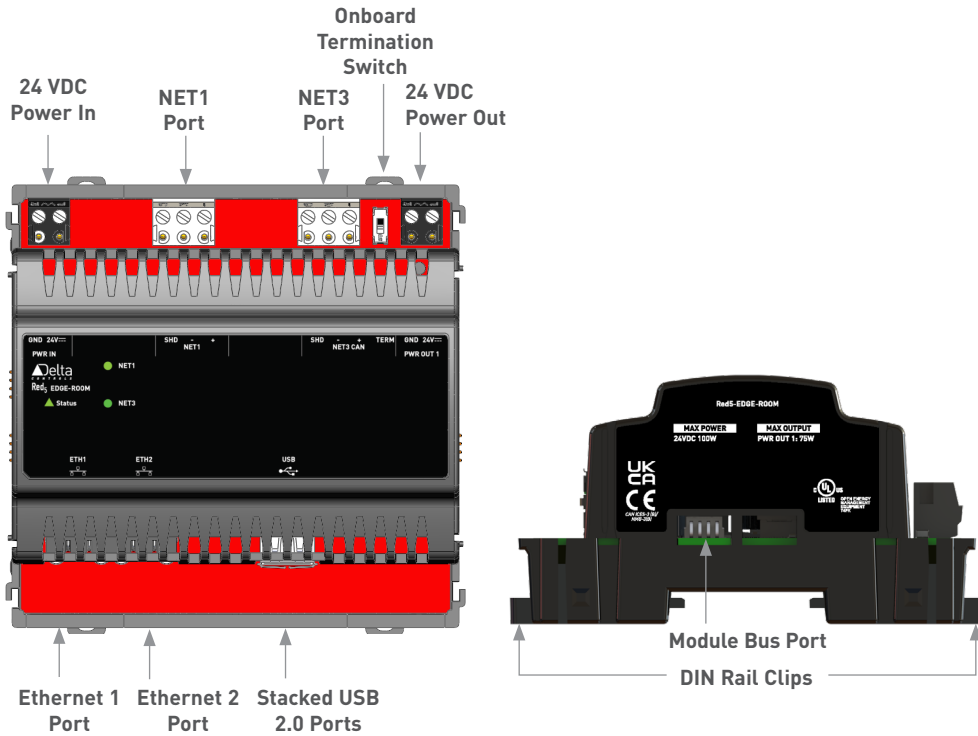
2 USB 2.0 ports

NFC, passive, two-way, short range

* BACnet/SC requires V4.11 firmware that is currently being approved by BACnet Testing Laboratories (BTL).

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Specifications (Continued)

Ambient Rating

-30°C to 55°C (-22°F to 131°F)
10% to 95% RH (non-condensing)

Dimensions

108 × 111 × 58 mm
(4.25 × 4.37 × 2.28 in.)

Weight

193 g (0.425 lb)

Enclosure Protection Rating

IP20

Compliance

CE
FCC
EAC

Listings

C-UL Listed
UL 916 Listed



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Updated December 2022_r

Order the Red5-EDGE-ROOM with one or more modules

Base Unit

Red5-EDGE-ROOM	Base unit: 2 network ports, 2 Ethernet ports, 1 power output, Modbus RTU, NFC
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Modules and Hubs

Red5-MODULE-4F4xP	I/O module: 4 universal I/O, 4 FET binary outputs
Red5-MODULE-8xP	I/O module: 8 universal I/O
Red5-MODULE-1D00R	Access module, single door support
Red5-MODULE-DALI	DALI lighting module: DALI interface, 100 mA power output
Red5-MODULE-PoE	Power over Ethernet module (IEEE 802.3at)
Red5-MODULE-SMI	SMI module for motorized blinds: SMI interface, 30 mA power output
03-HUB	Sensor hub (temp, hum, light, motion, Bluetooth, LED ring, microphone, speaker)
03-HUB-En868	03-HUB with EnOcean 868 MHz
03-HUB-En902	03-HUB with EnOcean 902 MHz

Subject to change without notice.

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Power Supplies

DRC-24V30W1AZ	Chrome Line Voltage DC power supply 24 V 30 W Class A EMC
DRC-24V60W1AZ	Chrome Line Voltage DC power supply 24 V 60 W Class A EMC
DRC-24V100W1AZ	Chrome Line Voltage DC power supply 24 V 100 W Class A EMC
DRS-24V30W1NZ	Sync Line Voltage DC power supply 24 V 30 W Class B EMC
DRS-24V50W1NZ	Sync Line Voltage DC power supply 24 V 50 W Class B EMC
DRS-24V100W1NZ	Sync Line Voltage DC power supply 24 V 100 W Class B EMC