

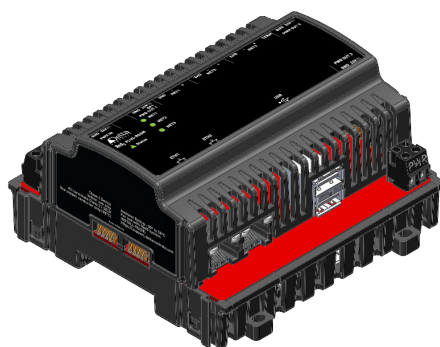
# Red5 Series

## Red5-PLUS-ROOM

### Description

The Red5-PLUS-ROOM is a fully programmable native BACnet building controller. As the primary integration engine of the Red5 system, the Red5-PLUS-ROOM contains memory storage and external communication ports, as well as control logic for the expansion modules. The Red5-PLUS-ROOM can support up to 12 I/O or gateway modules and up to 24 access modules, as long as the total number of modules does not exceed 24.

The Red5-PLUS-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, with 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.

### 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.
- ▶ Advanced 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 (5 W max)

24 VDC, 100 W max output fully loaded

#### Power Out

1 24 VDC switched power output

Short circuit protected

Overcurrent protected

2 24 VDC unswitched power outputs

#### 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

3 RS-485 ports supporting:

BACnet MS/TP up to 76800 bps, max 16 devices per Red5-PLUS-ROOM

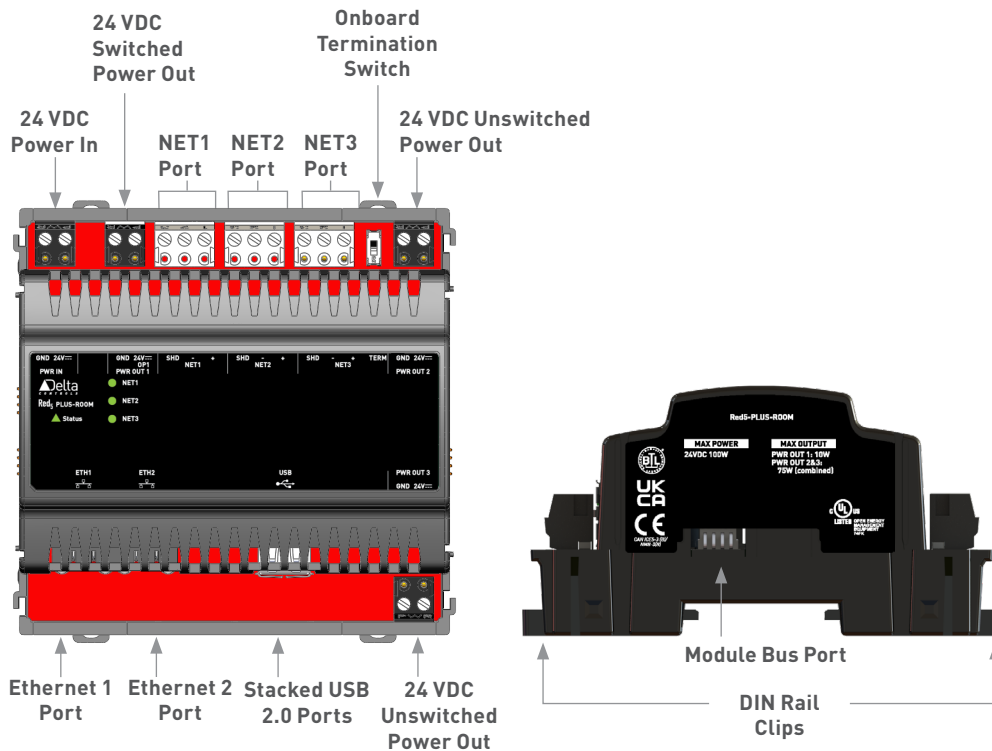
Delta LINKnet up to 76800 bps, max 12 devices per Red5-PLUS-ROOM\*

Modbus RTU up to 115200 bps, max 16 devices per Red5-PLUS-ROOM

\* Limit is 12 devices in V4.13 firmware or later. Otherwise, limit is 8.

# Red5 Series

## Red5-PLUS-ROOM



### Specifications (Continued)

#### Communication Ports (Continued)

- 1 CAN bus port
- 2 USB 2.0 ports

#### 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

#### Listings

- cULus 916 Listed

Order the Red5-PLUS-ROOM with one or more modules or hubs:

#### Base Unit

Red5-PLUS-ROOM	Base unit: 3 network ports, 2 Ethernet ports, 3 power outputs, Modbus RTU
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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-EXPAND-04	Power injector for Red5 expansion supporting up to 4 modules
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

Updated September 2023

Subject to change without notice.

# Red5 Series

## Red5-PLUS-ROOM

### Power Supplies

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