# Red5

## 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

* BACnet/SC requires V4.11 firmware or later.

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

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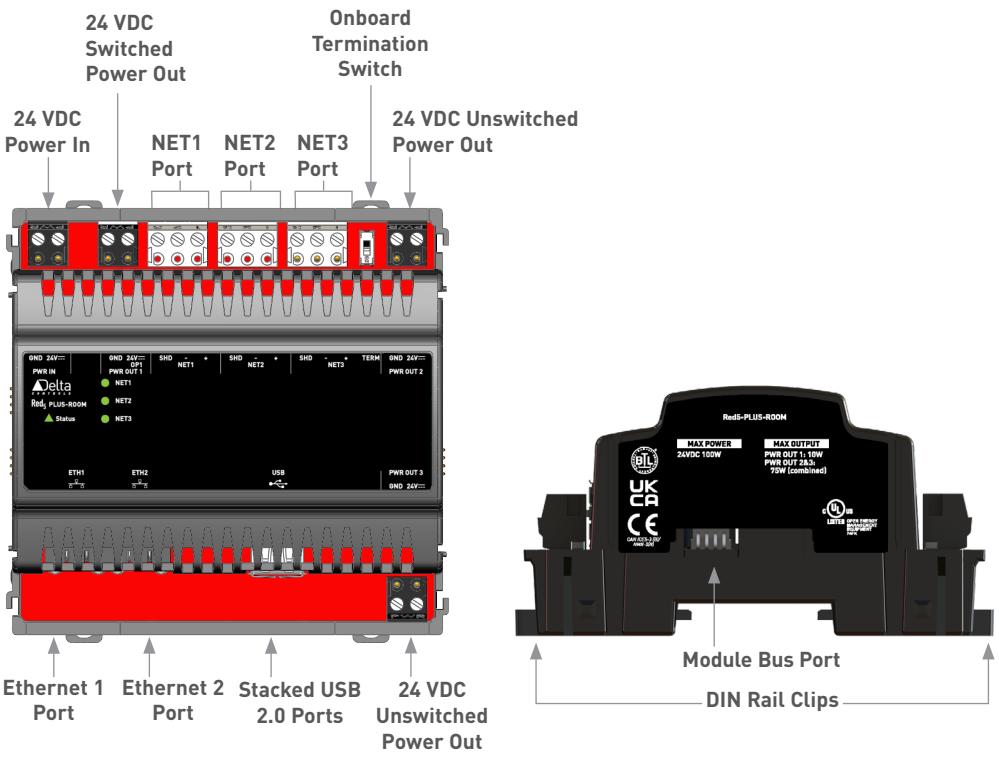


Order the Red5-PLUS-ROOM with one or more modules or hubs:

### Base Unit

| | |
|---|---|
| **Red5-PLUS-ROOM** | Base unit: 3 network ports, 2 Ethernet ports, 3 power outputs, Modbus RTU, NFC |

### 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-1DOOR** | 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 |
| **O3-HUB** | Sensor hub (temp, hum, light, motion, Bluetooth, LED ring, microphone, speaker) |
| **O3-HUB-En868** | O3-HUB with EnOcean 868 MHz |
| **O3-HUB-En902** | O3-HUB with EnOcean 902 MHz |

### 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
EAC

**Listings**
cULus 916 Listed

Subject to change without notice.





Delta CONTROLS
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## Red5-PLUS-ROOM

**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 |