Architecture for 230 VAC and 868 MHz regions

RadioRA 3 System Capacities

- Up to four processors per system to increase flexibility and extend range
- In-line controls, window treatments, Pico wireless controls, and sensors (Clear Connect – Type A)
  - Maximum of 200 devices[1] or 200 zones[2] per RadioRA 3 system (includes 4 auxiliary/wireless repeaters and 1 processor address)
  - RF range between repeaters is 18 m and 9 m to other devices, with a total possible coverage area of 762 m² per repeater/processor
- Vierti keypads, hybrid keypads, and Lumaris (Clear Connect – Type X)
  - Maximum of 200 devices[1] per RadioRA 3 system
  - Each Vierti device should be within 23 m of the processor
  - Each Clear Connect – Type X device should be within 6 m of at least two other Clear Connect – Type X devices
  - At least two Clear Connect – Type X devices must be within 6 m from the processor

Key – Wiring

- Network link (Ethernet)
- Low-voltage (2 conductor)[3]

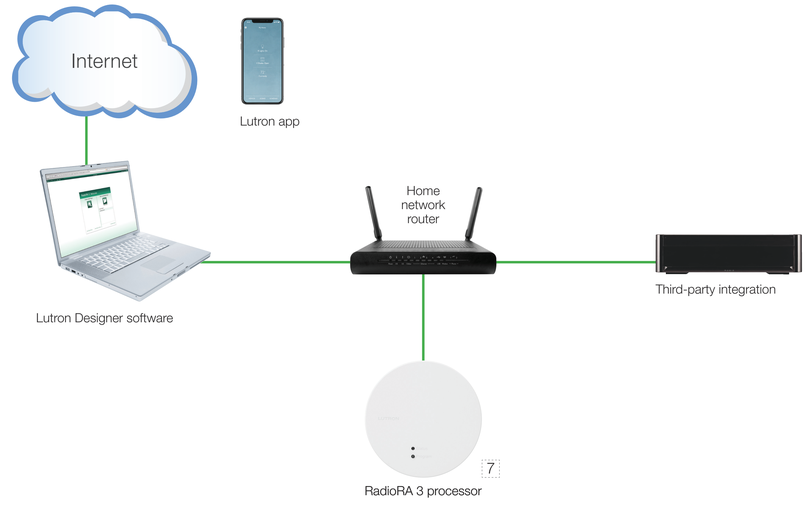
RadioRA 3 Processor

- 1 RJ-45 Ethernet port for programming/integration
- Two-way wireless communication
- Powered by an IEEE 802.3af-2003 or 802.3at-2009 compliant Power over Ethernet (PoE), supply, Lutron model L-POEI-G-BL or by others
- Standard Ethernet wiring (100 m max) used to connect processors to network
- 10/100 Mbit Ethernet

Key – Power

1. Line voltage 230 VAC
2. Low voltage 24 VAC
3. Low voltage 24 VDC
4. Low voltage 12 VDC
5. Plug-in transformer
6. Battery powered
7. Power over Ethernet (PoE)

Network Link



Clear Connect – Type X


1
Vierti keypad


1
Vierti hybrid keypad


Lutron LED tape extrusion


3
Lumaris RGB + tunable white tape light


3
RadioRA3 multi-channel wireless controller


1
Lutron CE power interface

Clear Connect – Type A


6
Pico wireless control


6
Radio Powr Savr wireless occupancy/vacancy sensors


1
Lamp dimmer


1
In-line dimmer


1
In-line switch


1
Fan speed control

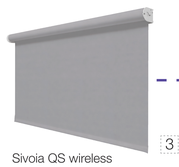

5
Wireless repeater


1
RF Softswitch module


1
RF 0-10V module


2 or 3
RF contact closure output module

Note: Not all available products are shown.


3
Sivoia QS wireless and Palladiom blinds


1
QSPS 10-output power panel


1
Flush-mounted and J-box-mounted power supplies


4 or 6
Triathlon blinds


1
Plug-in power supply


1
12V panel


6
Palladiom Wire-Free blinds

[1] Device – Any system component that requires a single address. Four addresses are reserved only for auxiliary/wireless repeaters on the Type A link (1 processor, 4 repeaters, and 95 additional devices).
[2] Zone – An output. An individual shade, dimmer, switch, or contact closure output.
[3] The wire gauge required for shades power conductors is dependent on shade size and number, wire run length, and power supply type being used. The wire gauge required for the tape light power conductors is dependent on the wire run length and power supply being used. Consult technical specifications of shade equipment for details.

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