RadioRA® 3 Architecture for 120VAC and 434 MHz regions

RadioRA 3 System Capacities

- Up to four processors per system to increase flexibility and extend range
- seeTouch, Maestro, Shades, Pico Wireless Controls, and Sensors (Clear Connect Wireless - 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 60 ft. (18 m) and 30 ft. (9 m) to other devices, with a total possible coverage area of 2500 sq. ft. (762 m²) per repeater/processor.
- Sunnata keypads, hybrid keypads, dimmers and switches (Clear Connect Wireless - Type X)
  - Maximum of 200 devices[1] per RadioRA 3 system
  - Each Sunnata device should be within 75ft of the processor
  - Each Sunnata device should be within 25ft of at least two other Sunnata devices
  - At least two Sunnata devices must be within 25ft from the processor

[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.

Key - Wiring

Network link (Ethernet)

Shade wiring (2 conductor)*

*The wire gauge required for shades power conductors is dependent on shade size and number, wire run length, and power supply type being used. Consult technical specifications of shade equipment for details.

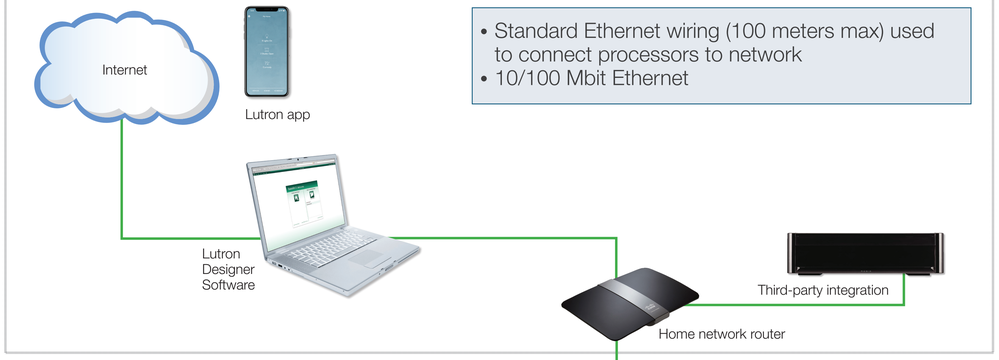
Key - Power

1 Line voltage 120VAC
2 Low voltage 24VAC
3 Low voltage 24VDC
4 Low voltage 12VDC
5 Plug-in transformer
6 Battery powered
7 Power over Ethernet (PoE)

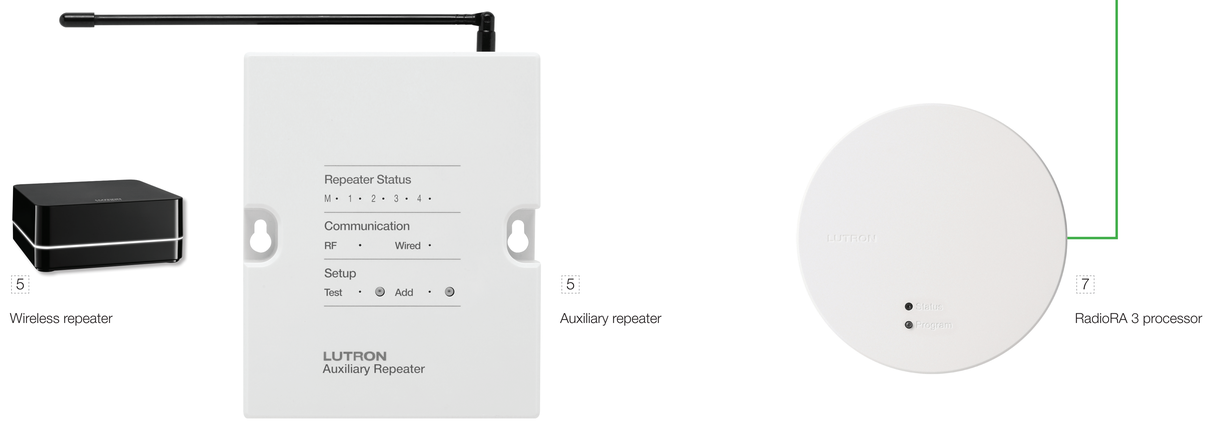
RadioRA 3 Processor

- 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-BL or by others.

Network Link



- Standard Ethernet wiring (100 meters max) used to connect processors to network
- 10/100 Mbit Ethernet

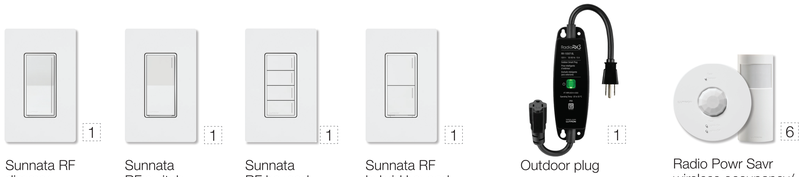


5 Wireless repeater

5 Auxiliary repeater

7 RadioRA 3 processor

Clear Connect Wireless Devices

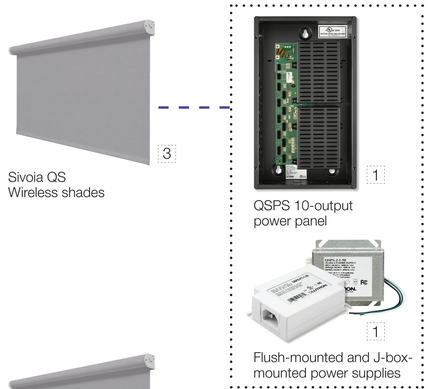


1 Sunnata RF dimmer
1 Sunnata RF switch
1 Sunnata RF keypad
1 Sunnata RF hybrid keypad
1 Outdoor plug
6 Radio Powr Savr wireless occupancy/ vacancy sensors

1 seeTouch keypad
6 Pico wireless control
5 or 6 seeTouch tabletop keypad
1 seeTouch C•L hybrid keypad
1 Maestro: dimmer switch fan control

6 Visor control transmitter
5 Visor control receiver with general purpose CCO/CCI
1 Tabletop lamp dimmer
1 Plug-in: Dimmer module Appliance module

1 RF Softswitch module
1 RF PWM/0-10V module
2 RF contact closure output module



3 Sivoia QS Wireless shades
1 QSPS 10-output power panel
1 Flush-mounted and J-box-mounted power supplies
4 or 6 Sivoia QS Triathlon shades
1 Plug-in power supply
1 12V Panel

Note: Not all available products are shown.

LUTRON

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