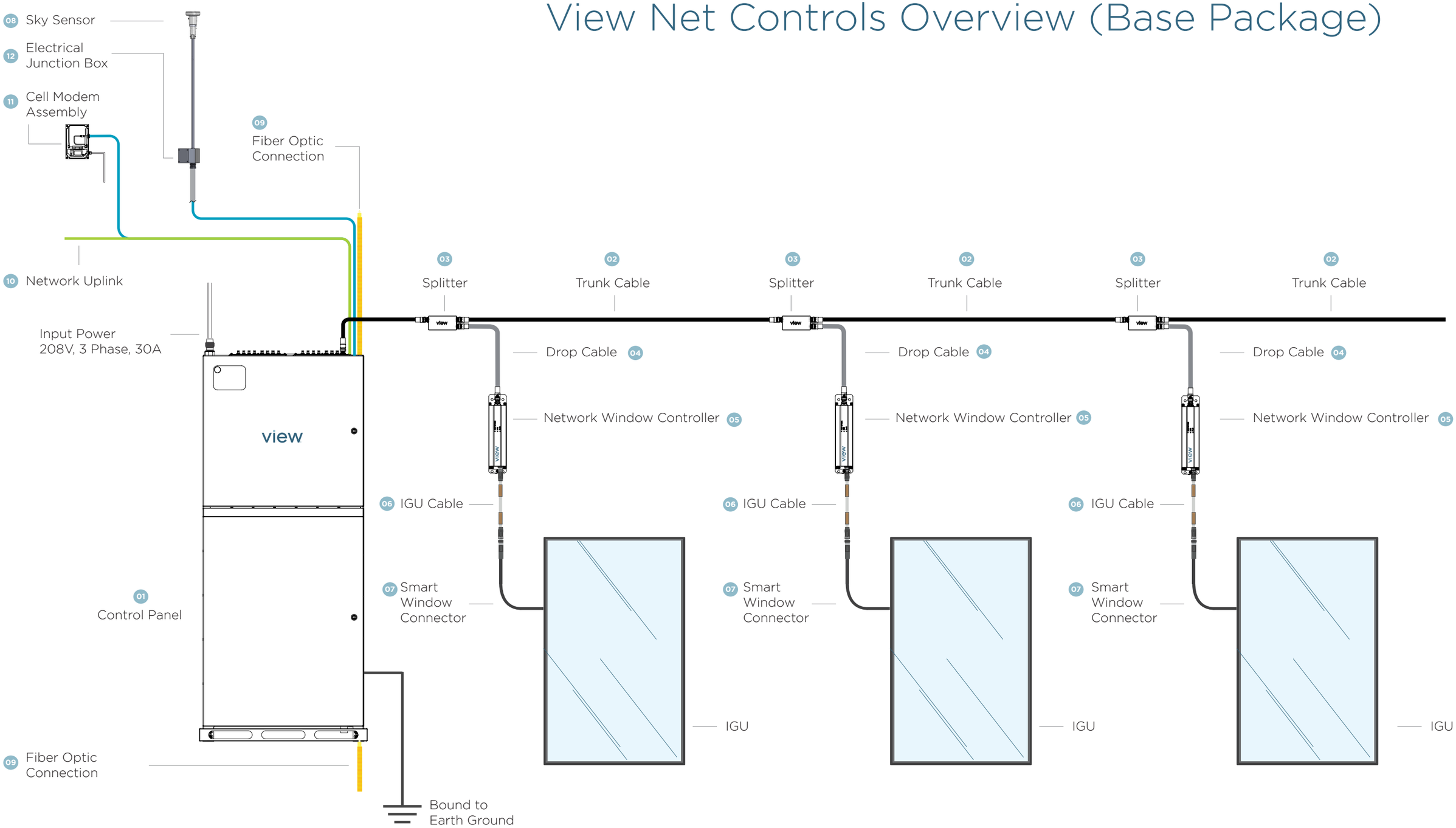
View Net Controls Overview (Base Package)



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Component Descriptions

Cabling System

The View cabling system uses a trunk line/drop line network topology. In this topology, the trunk cable carries both power and data through the entire length of the installation. Drop cables are then tapped off of the trunk cable using splitters at locations where network window controllers are installed. The network window controllers are then connected to individual IGU units via an IGU cable. Note: Component data sheets will supersede the information found here.

01 Control Panel

Wall-mounted enclosure (72" x 30" x 9") that contains the power supplies, floor controller, as well as auxiliary connections such as Ethernet and external sensors. At least one control panel is required for each installation. Each control panel can support up to 288 window controllers. Actual limits may vary depending on specific project considerations. For larger or multi-floor installations, multiple control panels may be required. Each Control Panel requires a dedicated 30-amp circuit (30-amp@208 VAC 3 phase).

Specifications for Control Panel:

- Input: AC 208V + 15%
- Frequency: 50-60 Hz + 6%
- Output Class: 2 48 VDC
- Bonded to Earth Ground

02 Trunk Cable

Provides power and data to the window controller. Short cables come pre-terminated. Bulk spool cables must be terminated manually. Cables require male BNC connectors. Standard coax crimp tool required for termination.

Specifications for Trunk Cabling:

- Max combined length approx. 1,000'
- Available in lengths 1', 5', 6' or 500', 1000' spools
- Available in standard and plenum rated cables

03 Splitters

Used to connect drop cables to the trunk cable. Splitters come in WYE configuration.

04 Drop Cable

Provides power and data to the window controller. Ties into the trunk cable via the splitter. Short cables come pre-terminated. Bulk spool cables must be terminated manually. Cables require male BNC connectors. Standard coax crimp tool required for termination.

Specifications for Drop Cabling:

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05 Network Window Controller

Facilitates power transmission to each IGU. Connected to a drop cable on one end and an IGU cable on the other end. Must be installed at an accessible, environmentally controlled location. One network window controller is installed per IGU. Includes one POE port via an IX connector.

Specifications for Window Controllers:

- Input: 48 VDC
- IGU Output: Range between + 5 VDC
- Dimensions: 1" x 1.47" x 5.63"
- POE Output: 48V, 7W

06 IGU Cable

Connects a network window controller to the IGU Smart Window Connector cable.

Specifications for IGU Cabling:

- Standard Tinting: Available in lengths from 1' to 100' (meter or fractional meter increments)
- Fast Tinting: Available in lengths from 1' to 50'
- Available in standard and plenum rated cables
- Max combined length from the WC to the IGU is 100'

07 IGU Smart Window Connector

Each IGU receives power from the control system through an IGU Smart Window Connector. The Smart Window Connector connector is embedded with a digital ID that is unique to that IGU's dimensions and specifications.

Specifications for IGU Smart Window Connector:

- ~15.5" +/- 1.5" length located 3" from corner. Location changes based on shape and dimensions. See IGU data sheet for exact location.
- Requires 7/16" hole size

08 Sky Sensor

Used to detect external light and infrared temperature levels. Data from the sensor is transmitted to the control panel for Intelligence. It is typically mounted on the roof top..

Specifications for Sky Sensor:

- Connects to View control panel via CAT5 cable.
- Mounts to rooftop, must be clear of obstructions, 360-degree view of the horizon, POE powered.

09 Fiber Optic Connection

For connection of multiple control panels on a site.

Specifications for Fiber Cables:

- Single Mode fiber
- Armored Cable with 96 strands
- Available in pre-terminated and field terminated lengths

10 Network Uplink

Contractor required to connect to customer network via ethernet or fiber (refer to View Interconnect drawing).

11 Cell Modem

Used as a temporary network connection to the View Site Ops monitoring system. Requires 110/120VAC 60Hz.

12 Electrical Junction Box (EJB)

Used for grounding the Sky Sensor and connecting to Control Panel.

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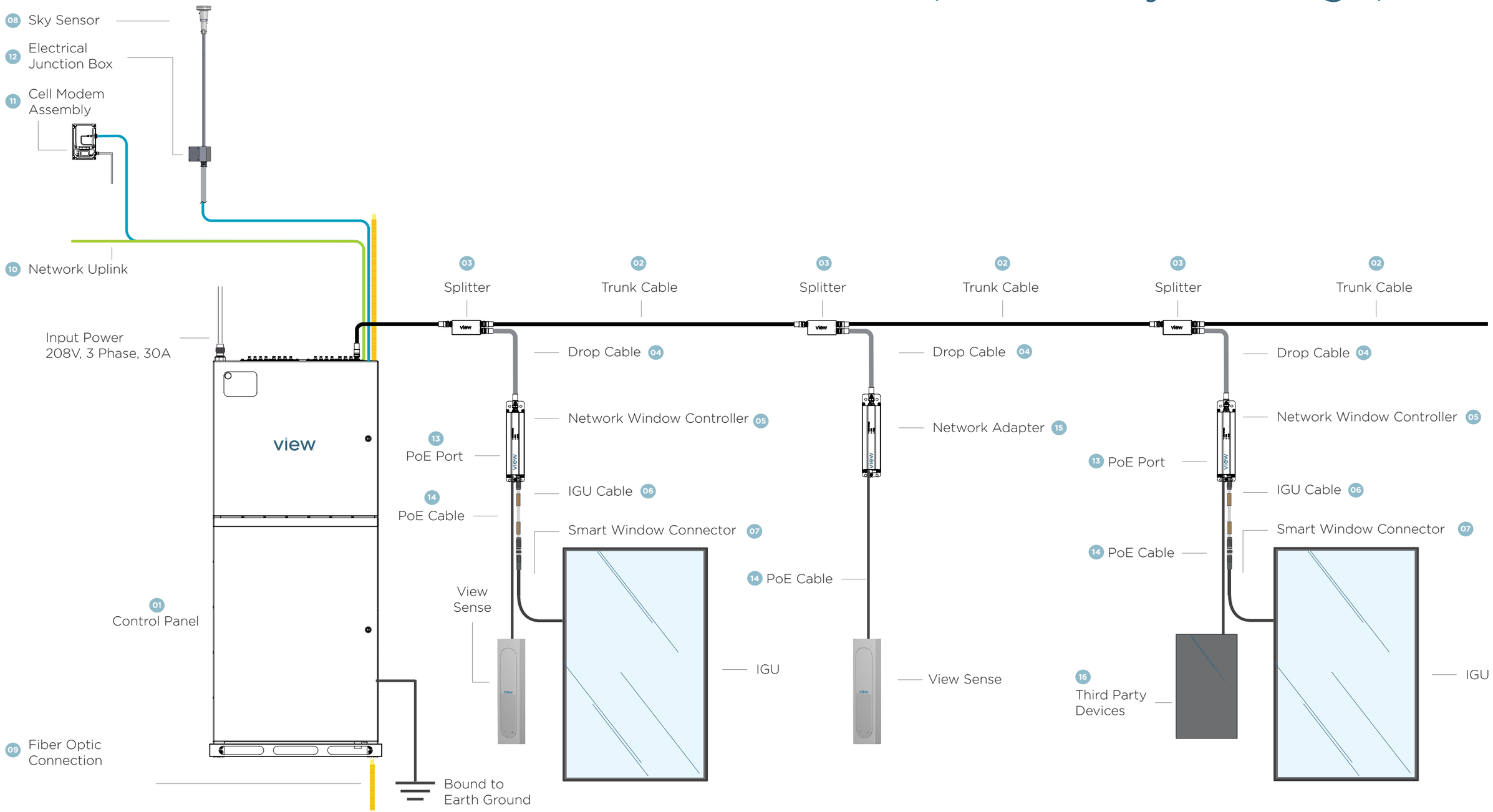
View Net Overview (IoT-Ready Package)



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13 PoE Port

Industrialized IX power over ethernet port that conforms to PoE standard 802.3af. Capable to supply data and power connectivity to any device within 100m using IX category 5e or better cable.

14 PoE Cable

IX Category 6 28 AWG cable for Power over Ethernet connectivity to the View Network Window Controller. Is available in pre-terminated lengths from 1M to 10M.

15 Network Adapter

Provides ethernet connectivity to devices connected to IX Port.

Specifications for Network Adapters:
- Input: 48 VDC
- IGU Output: Range between + 5 VDC
- Dimensions: 1" x 1.47" x 5.63"
- POE Output: 48V, 15W

16 Third Party Devices

All third party devices must be compliant with PoE 802.3af and use less than 7W of peak power. Device power consumption must be confirmed with View prior to installation to ensure the devices does not exceed the coaxial cable power limit.

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