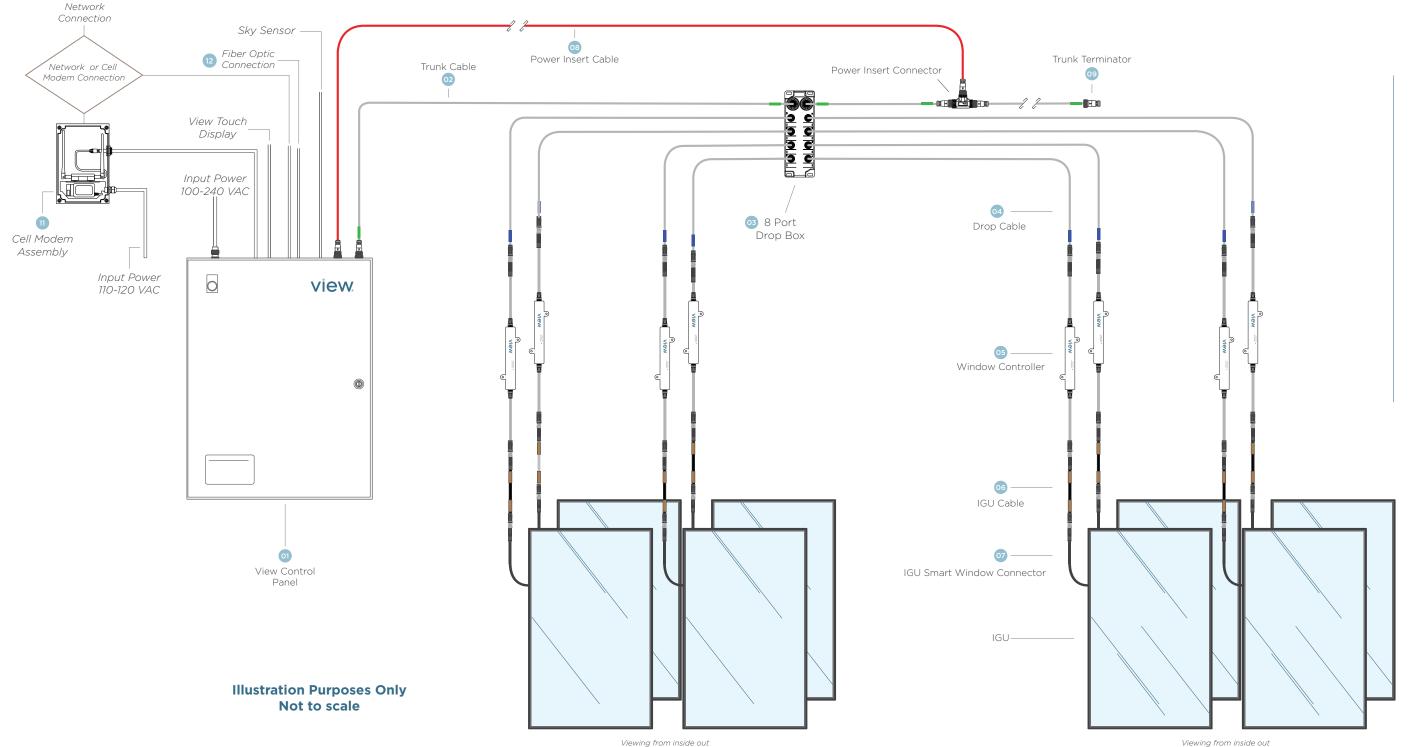
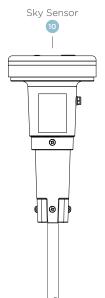


Diagram of the View Controls with Drop Box



Overview guide QDM-02-000021



Viewing from inside out

VIew

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 trunk connectors at locations where window controllers are installed. The window controllers are then connected to individual IGU units via an IGU cable. Note: Component data sheets will supersede the information found here.

Control Panel

Wall-mounted enclosure (21" x 29" x 9") that contains the power supplies, master 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 256 window controllers. For larger or multi-floor installations, multiple control panels may be required. Each Control Panel requires a dedicated 20-amp circuit (20-amp@120 VAC or 10-amp @240VAC).

Specifications for Control Panel:

Input Frequency Output

AC 100-240V + 15% 50-60 Hz + 6% Class 2 24 VDC

⁰² Trunk Cable

Pre-terminated cables fitted with ⁷/₈", 5-pin connectors. Simple, hand-screw connection with no special tools required.

Specifications for Trunk Cabling:

- Max combined length approx. 1,500'
- Available in lengths from 1' to 160' (meter or fractional meter increments)
- Available in standard and plenum rated cables

03 8-Port Drop Box

A network distribution component used to connect multiple Drop Cables to a Trunk Line. The distribution component will have 8 Drop Cable connection ports.

Orop Cable

Provides power and data to the window controller. Ties into the trunk cable via the trunk connector.

Specifications for Drop Cabling:

- Available in lengths from 1' to 32.9' (meter or fractional meter increments)
- Available in standard and plenum rated cables

05 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. Typically one window controller is installed per IGU.

Specifications for Window Controllers:

24 VDC Input Output Dimensions

Range between + 5 VDC $4-\frac{5}{8}$ " × $\frac{3}{4}$ " × $\frac{3}{4}$ "

00 IGU Cable

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

Specifications for IGU Cabling:

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

IGU Smart Window Connector

Each IGU receives power from the control system through an IGU Smart Window Connector. The Smart Window 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" +/- 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 Power Insert Cable

Transmits power from a power source to the trunk line via a power insert connector. The power insert cable is 14/4 wire (14-AWG/4-conductor) spool options.

For long trunk lines, power inserts may be required to provide appropriate power. The power inserts can originate from:

Specifications for Power Insert Cabling:

- Field wireable power insert cables available in up to 1.000' spools
- One power insert is typically required after every (24) window controller connections

Skv Sensor

Specifications for Sky Sensor:

Cell Modem

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

12 Fiber Kit

For connection of multiple control panels on a site: Two optional fiber-optic kits are available for network connectivity greater than 328'.

Specifications for Fiber Kit:

Component Descriptions

1. Power output ports from the control panel 2. Standalone power injection panel (not shown in diagram)

• All power insert cables are plenum rated

• Trunk Terminator

Installed at the end of each trunk line and also all unused trunk ports at the View control panel.

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

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

• Multi Mode fiber for distances greater than 328' but less than 1500 feet.

• Single Mode fiber for distances greater than 1500 feet. • Maximum 2 Fiber Kits per Control Panel.