VistaMotion™
PoE Motorized Shade Hub

PROJECT:	QTY:
TYPE:	CATALOG:

SYSTEM OVERVIEW

The VistaMotion™ PoE Motorized Shade Hub provides power and control for up to (28) motorized shades and draperies. It acts as the intelligence hub for the shade network along with powering PoE shade motors at a max distance of 328 ft (100 m). The Hub receives AC line voltage power and converts it to low voltage DC power and then distributes the energy to shade motors via CAT6 or CAT5E 22AWG ethernet cable. Through the use of PoE, power and data are provided on a single cable to shade motors eliminating the need of duplicate infrastructure for power and data. If reliability, reduced maintenance and / or integration capabilities are important, this is the appropriate solution.

FEATURES:

- Provides real time clock control and command of the motorized shade system
- Each hub supports multiple PoE motors, wall stations, sensors and more
- Multiple hubs can connect and scale via the 10/100 Ethernet network port
- API allows for deep integration with 3rd party systems
- Ultra quiet fanless operation allowing use in noise sensitive locations
- Kitted for ease of assembly with UL and ETL listed components*
- Knockouts provided in the top, bottom, right and left side
- Keylocking door latch included

ORDERING GUIDE:

Example Catalog # VM POE WM SOM 28

Family	Power over Ethernet	Mounting	Motorized Shades	/	Qty
VM VistaMotion™	**POE**	**WM** Wall Mount	**SOM** Somfy Motorized Shades		**7** **14** **21** **28**

*All components except the 8-port switch are ETL or UL listed. The 8-port switch is powered by a UL listed power supply. The 8-port switch is a low voltage device and technically does not require UL. if the switch operates on low-voltage DC power and is powered from a UL-listed source, it is treated as part of a Class 2 circuit under NEC Article 725 and considered a Limited-Power Device. Since the power supplies in use are UL-listed, the switch itself can be considered a low-voltage component and is not subject to a separate safety certification. The supply limits current and energy that no fire or shock hazard exists which removes the need for the switch to have its own UL/ETL mark.

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SPECIFICATIONS

ELECTRICAL

Input Power Voltage:	90 to 240VAC
Input Current:	VM POE WM SOM 7: 4.8A/115VAC VM POE WM SOM 14*: (2) 4.8A/115VAC VM POE WM SOM 21*: (3) 4.8A/115VAC VM POE WM SOM 28*: (4) 4.8A/115VAC
Output Power Voltage:	48 to 54VDC
Output Power:	VM POE WM SOM 7: 480W(VA) VM POE WM SOM 14: 960W(VA) VM POE WM SOM 21: 1,440W(VA) VM POE WM SOM 28: 1,920W(VA)
# of Output Ports:	8, 16, 24 or 32 IEEE 802.3af/at/bt (PoE+/PoE++) up to 90W (1 of every 8 ports reserved for networking)

* supporting independent feeding or parallel aggregation

MECHANICAL

Enclosure Dimensions:	VM POE WM SOM 7: 16” H x 16” W x 8” D VM POE WM SOM 14/21/28: 24” H x 20” W x 8” D
Standard Color:	Gray
Enclosure Material:	Carbon Steel
Fully Loaded Weight:	VM POE WM SOM 7: 25 lbs VM POE WM SOM 14/21/28: 50 lbs
Enclosure Only Weight	VM POE WM SOM 7: 20 lbs VM POE WM SOM 14/21/28: 35 lbs
Enclosure Type:	NEMA Type 1

ENVIRONMENTAL:

Operating Temperature:	35 ~ +40C
Storage Temperature:	-40 ~ +85C
Relative Humidity:	20 ~ 90% RH non-condensing
Environmental Space:	Indoor use only

I/O:

VM POE WM SOM 7/14
- (4) Relay Control Outputs
- (8) Sensor Inputs
- (2) Wall station Bus Ports
- (1) ETH Port: For networking purposes

VM POE WM SOM 21/28:
- (8) Relay Control Outputs
- (16) Sensor Inputs
- (4) Wall station Bus Ports
- (2) ETH Port: For networking purposes

SINCLAIR® DIGITAL

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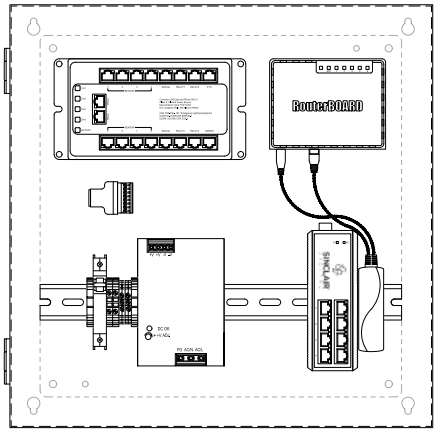
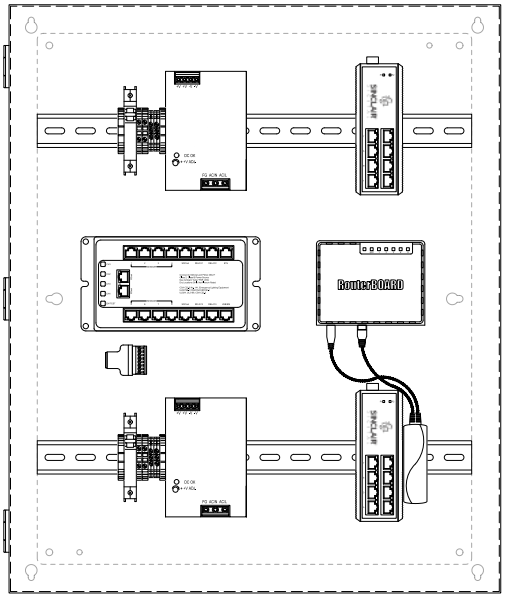
ADDITIONAL DRAWINGS

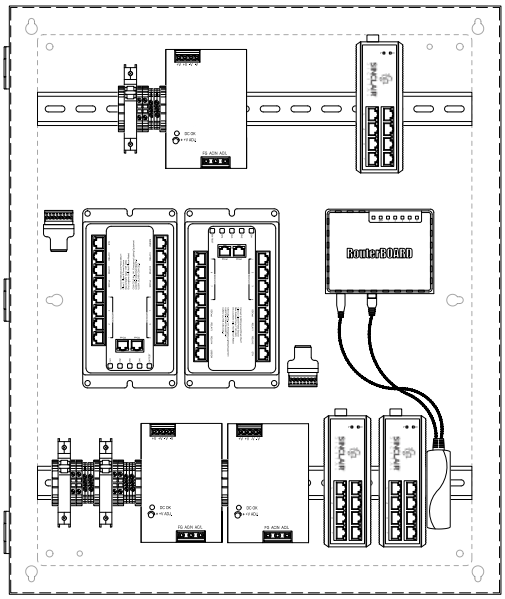
VM POE WM SOM 7



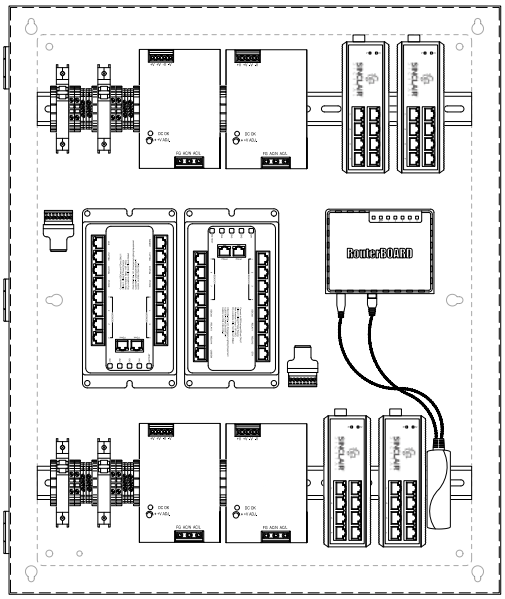
VM POE WM SOM 14



VM POE WM SOM 21



VM POE WM SOM 28



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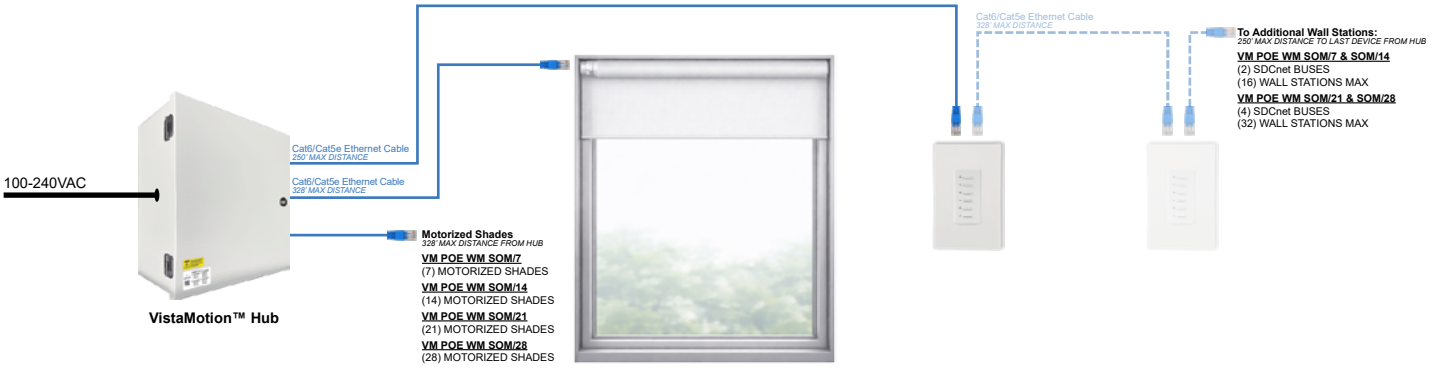
TOPOLOGY DIAGRAM



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OUTPUT POWER / SHADE TABLES

- Design Assumption = 85%
- One PoE port per shade motor
- Max supported shades = min(port count, usable power / watts per shade)

USABLE POWER @ 85%

Rated Power	Usable Power
480 W	408 W
960 W	816 W
1440 W	1224 W
1920 W	1632 W

SINGLE-LOAD (UNIFORM SHADE TYPE) TABLE — 85%

Product Size	Usable Power	30W	51W	60W	75W
7 Shades	408 W	7	7	6	5
14 Shades	816 W	14	14	13	10
21 Shades	1224 W	21	21	20	16
28 Shades	1632 W	28	28	27	21

THE 28-SHADE PLATFORM IS:

- Port-limited for 30W & 51W
- Lightly power-limited for 60W
- Optimized for large 75W shade populations

MIXED-LOAD SCENARIO TABLE — 85% - VM POE WM SOM 7 (408 W USABLE)

Scenario	30W	51W	60W	75W	Total Shades	Power
A	4	0	0	1	5	195 W
B	3	1	0	1	5	216 W
C	2	0	2	1	5	285 W
D	1	0	1	2	4	240 W
E	0	0	0	5	5	375 W

MIXED-LOAD SCENARIO TABLE — 85% - VM POE WM SOM 14 (816 W USABLE)

Scenario	30W	51W	60W	75W	Total Shades	Power
A	6	0	2	2	10	450 W
B	5	2	2	2	11	492 W
C	4	0	4	2	10	540 W
D	3	0	3	3	9	555 W
E	1	0	1	8	10	690 W

MIXED-LOAD SCENARIO TABLE — 85% - VM POE WM SOM 21 (1224 W USABLE)

Scenario	30W	51W	60W	75W	Total Shades	Power
A	8	0	4	4	16	720 W
B	6	3	4	4	17	813 W
C	5	0	5	5	15	825 W
D	4	0	4	6	14	930 W
E	2	0	0	12	14	900 W

MIXED-LOAD SCENARIO TABLE — 85% - VM POE WM SOM 28 (1632 W USABLE)

Scenario	30W	51W	60W	75W	Total Shades	Power
A	12	0	6	6	24	1080 W
B	10	4	6	6	26	1236 W
C	8	0	8	8	24	1320 W
D	6	0	6	10	22	1290 W
E	2	0	0	21	23	1575 W