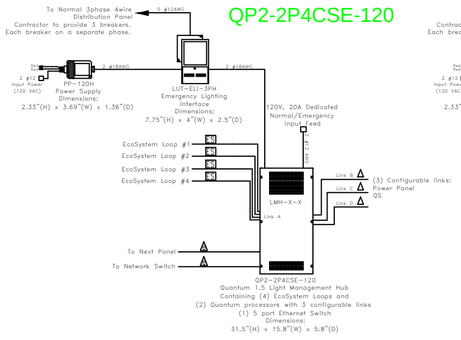
QUANTUM 1.5.slb

QP2-2P4CSE-120



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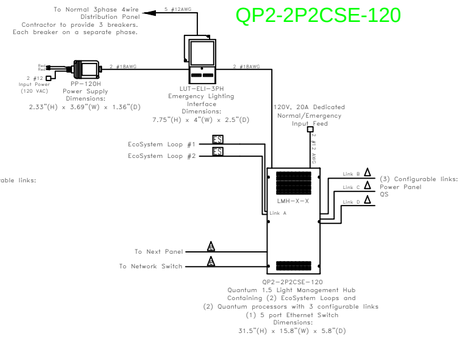

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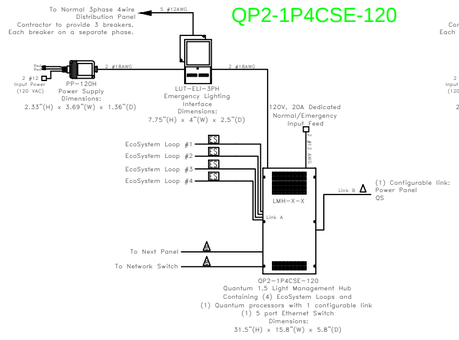

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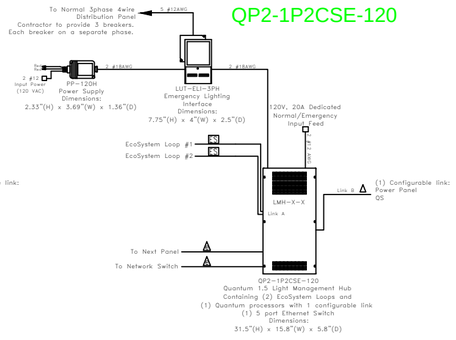
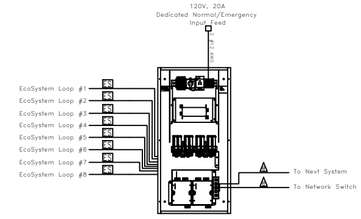
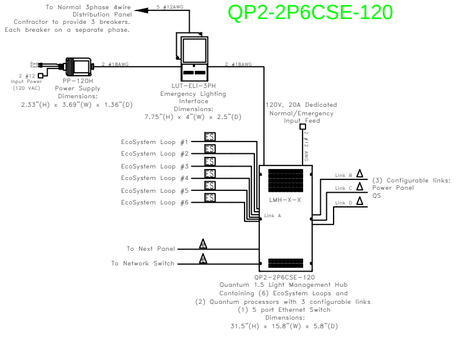


QP2-2P8CSE-120 DETAIL



QP2-2P8CSE-120 Quantum 1.5 Light Management Hub
Containing (8) EcoSystem Loops and
(2) Quantum processors with 4 configurable links
(1) 5 port Ethernet Switch
Dimensions:
31.5"(H) x 15.8"(W) x 5.8"(D)

QP2-2P6CSE-120



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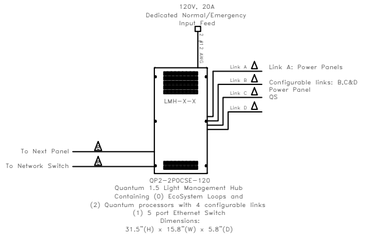

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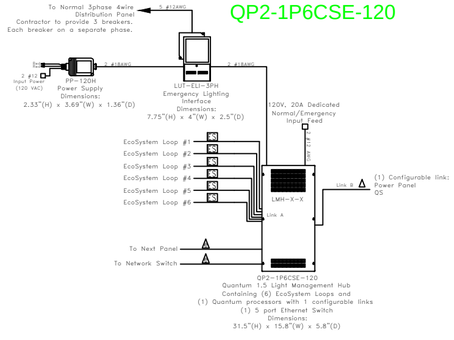

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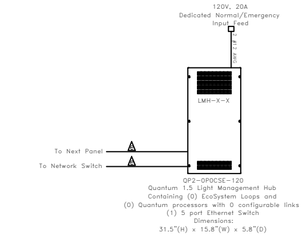


QP2-0P0CSE-120
Quantum 1.5 Light Management Hub
Containing (0) EcoSystem Loops and
(0) Quantum processors with 0 configurable links
(1) 5 port Ethernet Switch
Dimensions:
31.5"(H) x 15.8"(W) x 5.8"(D)

WIRING NOTES

WIRING NOTES:

△ Lutron cable GRX-CBL-46L (5 Conductor Non-Plenum) or 2 #12 AWG (2.5mm²), 1 Belden #9461 and between panels add 1 #18 AWG (1.0mm²) for emergency sensing.

● 2 #12AWG (2.5 mm²)

○ 3 #12AWG (2.5 mm²)

EcoSystem Bus:
Lutron cable C-CBL-216-GR-1 (2 #16 Conductor Non-Plenum) or C-PCBL-216-CL-1 (2 #16 Conductor Plenum rated).
Otherwise use 2 #16 AWG by others.

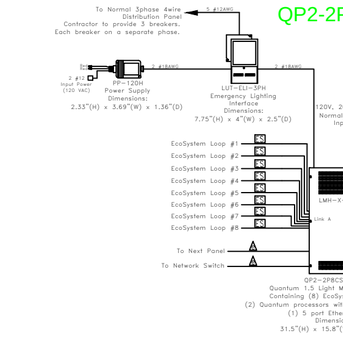
△ CAT5e or better cable for dedicated Lutron network terminated with RJ45 connectors (to be provided by others). 328 feet (100m) maximum run.

△ Fiber Optic Cable for dedicated Lutron network terminated with appropriate Fiber Optic Connectors (to be provided by others).
Note: Requires Dedicated Fiber Optic Link (single-mode or multi-mode).

NOTE SENSOR PLACEMENT

IMPORTANT NOTE REGARDING SENSOR PLACEMENT
THE OCCUPANCY SENSORS & DAYLIGHT SENSORS ON THIS ECOSYSTEM LOOP LAYOUT WERE NOT PLACED BY LUTRON. THIS ECOSYSTEM LOOP LAYOUT IS FOR THE CONFIGURATION OF THE SENSORS ONLY. SATISFACTORY ECOSYSTEM LOOP LAYOUT AND ACTUAL LOCATIONS OF THE SENSORS SHOULD BE DETERMINED BY FOLLOWING THE LUTRON SPECIFICATION SHEETS AND THE INSTALLATION INSTRUCTIONS.

QP2-2P8CSE-120



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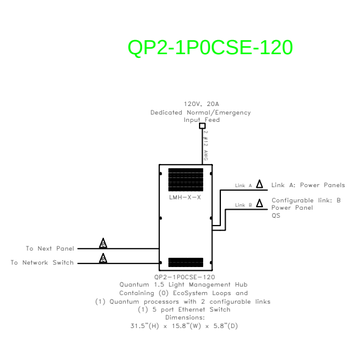

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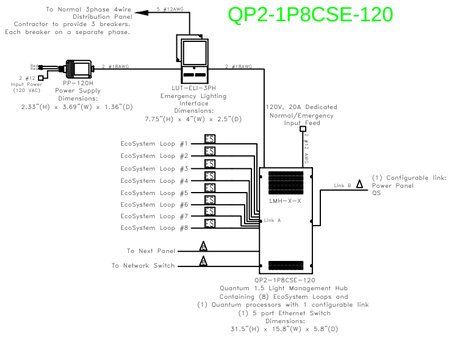
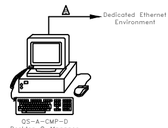
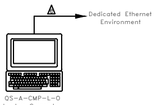


QS-A-CMP-D



QS-A-CMP-D
Desktop Q-Manager

QS-A-CMP-L-0



QS-A-CMP-L-0
Laptop Computer

QS Link Controls

QS LINK CONTROLS

QS — Lutron Part: LOS-CDT-XXXX-WH: Dual Technology Ceiling Mount Sensor. Provides power from a power pack and wire signal to a QS-IO unit.

QSS — Lutron Part: LOS-CDT-2000R-WH: Dual Technology Ceiling Mount Sensor. Provides power from a power pack and wire signal to a QS-IO unit.

PP — Lutron Part: PP-120H or PP-277H: Power Pack Provides power to Lutron occupancy sensors in the switching areas. Located in Electrical Closets.

IO — Lutron Part: QSE-IO: Provides 5 contact inputs to receive signals from occupancy sensors, daylight sensors, etc. in the switching areas.

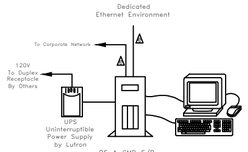
2B — Lutron Part: QSWS2-2B-WH: QS wall control with 2-Buttons for ON / OFF. Wallstation recalls lighting presets for any group of lights in the system.

5B — Lutron Part: QSWS2-5BRL-WH: QS wall control with 5-Buttons, raise and lower for control of 4 scenes plus OFF. Wallstation recalls lighting presets for any group of lights in the system.

7B — Lutron Part: QSWS2-7B-WH: QS wall control with 7-Buttons, for control of 6 scenes plus OFF. Wallstation recalls lighting presets for any group of lights in the system.

RS232 — Lutron Part: QSE-CI-NWK-E: QS interface to communicate via TCP-IP or RS232 with AV systems.

QS-A-CMP-S/R SERVERS

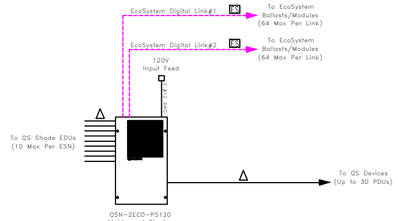


Quantum Lighting Management System dedicated server. Tower case or rack mount can be provided. Customer provided server must meet specification detailed in QS-A-CMP-RD-0 spec. sheet. To be located in customers corporate data center. Installation to meet specifications and requirements in QS-A-CMP-R-0 spec sheet.

UPS - POWER SUPPLY

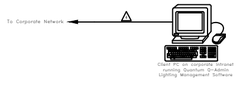
UPS Uninterruptible Power Supply by Lutron
Provides 30 min. of backup power for Lighting Management System Server and peripherals.
Configured to automatically and safely shut down server after 20 min. of power outage.

QSN-2ECO-PS120



Lights and Shades
Energi Savr Node (ESN)
(2) EcoSystem Digital Links
(1) QS Communication Link,
and (1) Sivoia QS
10 Output Transformer Panel
Dimensions:
24"(H) x 15.13"(W) x 4.19"(D)

USER INTERFACE



Client PC on corporate intranet running Quantum Q-Admin Lighting Management Software

NOTE-QUANTUM NETWORK

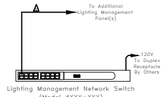
When A Lighting Management Network (LMN) is required to enable communications between Individual Light Management Hubs (LMH) and between LMH and the system server/desktop/laptop (Q-Manager). The LMN requires a dedicated LAN or VLAN. It is the responsibility of the Network Provider to ensure the reliability and security of the LMN.

CatSe or better Ethernet cable to be run for dedicated LMN terminated with RJ45 connectors (provided by others). The number of Ethernet hops/segments between the server/desktop/laptop (Q-Manager) and any LMN node shall not exceed 6. Total length of Ethernet cable shall not exceed 328 ft (100m) point-to-point.

If longer runs are required, multi-mode fiber optic cable can be used instead with appropriate fiber optic connectors (provided by others). Consult with Network Provider for standard Ethernet and Fiber Optic wiring rules for distance and separation as well as for placement of switches, routers, hubs, etc.

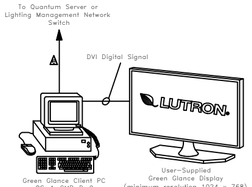
For more information regarding network equipment requirements and network configuration, please refer to the Quantum Lighting Management Network specification sheet or contact Lutron.

Ltg Mgmt Network Switch

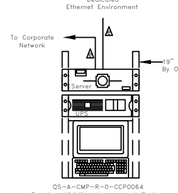


Lighting Management Network Switch
(Model #XXX-XXX).

Green Glance PC and Display



QS-A-CMP-R-0-CCP0064



Quantum Lighting Management System dedicated Rack Mounted Server, UPS, & Keyboard/Monitor.

NOTE-EMERGENCY FUNCTION

EMERGENCY FUNCTION

When normal power loss is detected by the LUT-ELI-3PH, a signal will be sent to the Quantum bus supply located in the Light Management Hub. All EcoSystem ballasts that have emergency power will go to their emergency state.