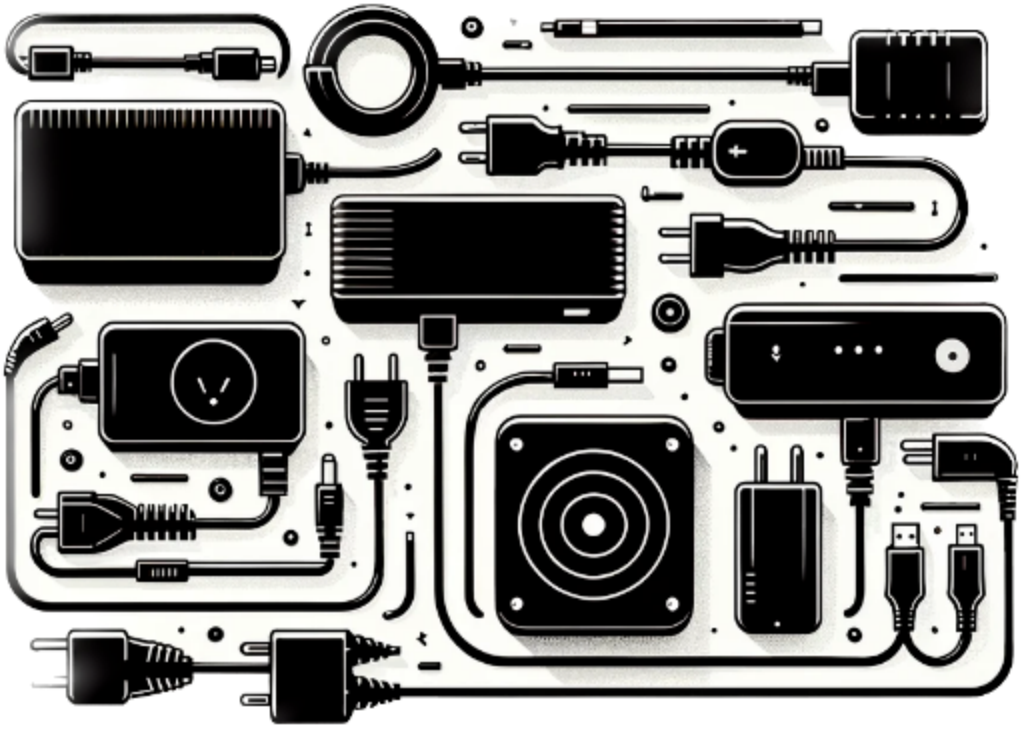
RECOMMENDED DC POWER SUPPLIES



ABOUT THIS GUIDE

Selecting the appropriate power supply for an X-PoE switch is a critical decision, especially for switches drawing up to 1000W under full load. This guide is designed to assist in choosing suitable power supplies for various setups, ranging from small systems to large, centralized installations.

SINGLE POWER SUPPLIES FOR SMALL SYSTEMS OR DISTRIBUTED CLUSTERS

Single power supplies are ideal for small-scale systems or distributed clusters of switches. These supplies are typically more compact and can be easily integrated into smaller lighting control systems or in scenarios where switches are spread across different locations. Keep in mind, if the lighting loads on the switch total less than 1,000W, it is not necessary to provide the switch with 1,000W.

Mean Well HEP Series

The Mean Well HEP series power supplies are ideal for single or a single switch or small X-PoE systems. The output voltage can be varied to 57V for optimal compatibility with the X-PoE switches. They are also fan-less, and designed for harsh environments, making them suitable to be installed almost anywhere.

Mean Well HEP-1000-48

Mean Well SDR Series

The Mean Well SDR series power supplies are another ideal choice for single switch or small X-PoE systems, particularly due to their DIN rail compatibility. The output voltage can be varied for better compatibility with the X-PoE switches. They are also very compact, making them easy to fit into most installations.

Mean Well SDR-960-48

LARGE POWER SYSTEMS FOR CENTRALIZED INSTALLATIONS

For larger, centralized rack mount installations, where multiple switches are housed together, larger power systems are recommended. These systems are designed to be rack-mounted, ensuring efficient space utilization and ease of maintenance.

Mean Well RCP Series

The Mean Well RCP series power supplies are best suited for larger rack mount X-PoE systems. The output voltage can be varied to 57V for optimal compatibility with the X-PoE switches. These power supplies can also be configured with various power supply modules, allowing for a variety of system sizes.

Mean Well RKP-1U

Mean Well RCP-2000-48

For installations requiring more than 8,000W, work with a Luum.io team member to find the right power supply solution.

ISOLATION REQUIREMENTS

All power supplies for the X-PoE switch must be isolated. Non-isolated power supplies are not supported. Isolation ensures that the output of the power supply is electrically separated from the input (mains or other upstream DC source). This is critical for:

- **Safety compliance**: Isolation protects users and connected equipment from hazardous voltages.
- **System protection**: It prevents ground loops, noise coupling, and circulating currents between the XPoE switch and other interconnected devices.
- **Standards alignment**: Isolated power supplies are required to meet Class 2/Class SELV limits and UL listing requirements for low-voltage lighting and control systems.

Using non-isolated power supplies can introduce safety hazards, violate electrical code, and compromise the reliability of the X-PoE system.

RELATED INFORMATION

Technical Support

Questions about sizing a power supply for an X-PoE switch can be sent to support@luum.io.

Document Feedback

While we have taken great care to ensure the accuracy and completeness of this document, we welcome your feedback and suggestions. If you notice any errors or omissions, or feel a topic could benefit from further explanation, please email your feedback to support@luum.io.

Revision History

Date	Revision	Notes
11/3/2026	A	Converted to the current guide format.

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