



# LP-2403 LAN-POWER

## 3 Slot PoE Chassis Installation Guide

### Purpose of Guide

This Guide provides information and procedures for the product installation and operation of the **LP-2403 – 3 Slot Power over Ethernet Chassis**. This chassis **MUST** be used in conjunction with one of the LAN Power PoE Modular Cards. It currently has the option of either the **LP-2408** - 8 Port (18 Watt per Port) Modular Card and/or the **LP-2404** - 4 Port 'High Power' (36 Watt per Port) Modular Card installed to any of the 3 slots on the LP-2403. The LP-2403 PoE Chassis has a 450 Watt power supply. The internal power supply are not serviceable by any personnel other than LAN Power Technicians. This document is intended for technical personnel responsible for installing and operating Power over Ethernet products in a Local Area Network (LAN) environment. To use this document effectively, you should have a working knowledge of Local Area Networking (LAN) concepts and hardware installation. In addition, you should be familiar with the following: connection of Patch Cables with RJ45 connectors and LAN addressing map for your particular Network, mounting of Network hardware in a 19" equipment rack and local practices for mains power cord connections.

### IMPORTANT SAFETY INSTRUCTIONS FROM LAN-Power

Read and keep these instructions. Follow all instructions and heed all warnings. Do not use this equipment near water and clean only with a dry cloth. Do not block any equipment ventilation openings. Install in accordance with manufacturer's instructions. Do not install near any heat sources such as radiators, stoves, or other apparatus (including amplifiers) that produce heat. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades and a third grounding plug. The wide blade or the third prong is provided for your safety. If the provided grounding prong does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the equipment. Unplug this equipment during lightning storms or when unused for long periods of time. Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as power cord or plug damaged, liquid has been spilled, or object has fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped. The AC Mains plug or appliance coupler shall be readily available to the operator as a means of power disconnection.

**WARNING** – Only connect equipment to mains power outlet having protective earthing or grounding connection. To reduce the risk of fire or shock, do not expose this equipment to rain or moisture. **CAUTION** – These servicing instructions are for use by qualified service personnel only. To reduce the risk of electrical shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

**If You Need Help** or additional support relating to the contents of this Guide, please contact LAN Power Technical Support at **(510) 275-4572** or visit the website: [www.lan-power.com](http://www.lan-power.com) for further information

**Before contacting LAN-Power for Technical Support**, please have the following information ready:

Product model number and unit serial number. A description of the failure or symptoms of problem. A description on any action(s) already taken to resolve the problem (e.g., changing ports, rebooting the unit, etc...). The type of End Device being powered including Manufacturer Name and Part Number. Powering requirements of the End Device. A description of your Network environment (layout, Ethernet Switch description, cable type, etc...). The unit history (i.e., have you returned the unit before, is this a recurring problem, etc...).



**Electrical Hazard: Only qualified personnel should install this unit.  
Read instructions before attempting to install this unit.**



**Verifying Contents of Package** – Unpack the PoE Chassis and verify that you have all the following items:  
**1 x LP-2403** (3 Slot PoE Chassis with 19" 1 RU tabs) and **1 x AC/Mains Power Cord**

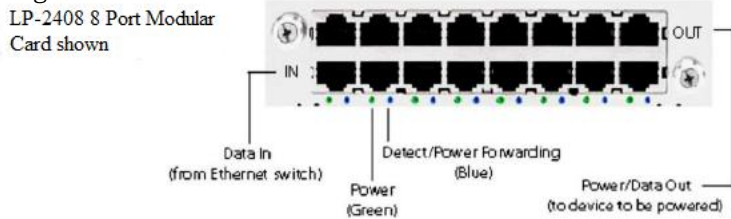
**Technical Considerations** – Before you mount the LP-2403 Chassis to a fixed location, consider all of the following: determine optimal placement, check patch cord routing and AC/Mains outlet location. Collect and document Network information as required. Ensure the cable length (including and patch cords) from the Ethernet Network Switch to the Powered End Device does not exceed 100 meters/328 feet total length. **Note:** The LP-2403 PoE Chassis IS NOT a repeater and does not amplify the Ethernet data signal. The

LP-2403 Chassis must be used in conjunction with an Ethernet Switch. Connect the LP-2403 Chassis to a grounding type AC/Mains outlet (100-240 VAC), with a maximum 15A circuit breaker, using the standard power cord supplied. Allow for easy access to disconnect the unit power cord from the AC/Mains outlet or UPS, if necessary. Do not cover the unit or block airflow with any other objects. Keep the unit away from excessive heat, humidity, vibration and dust. The LP-2403 Chassis is designed for installation in a wiring closet (optimally fitted into 19" Rack). Installation must at all times conform to local regulations.

### Powering Up and Installing the LP-2403 PoE Chassis and Modular Card(s)

Plug one end of the power cord into the LP-2403 PoE Chassis and the other end into a ground AC/Mains power source. Units are typically connected to a power strip or other power outlet that may be cycled on and off. An Uninterruptible Power Supply (UPS) may be used. This assures uninterrupted power to the End Devices should there be a loss of AC/Mains Power. Carefully install either the **LP-2408** - 8 Port (18 Watt per Port) Modular Card and/or the **LP-2404** - 4 Port 'High Power' (36 Watt per Port) Modular Card into the slot(s) of the LP-2403 PoE Chassis. Carefully align Modular Card PCB (Printed Circuit Board) edges with the Modular Card guide slots of the LP-2403 PoE Chassis. Slide Modular Card in almost all the way until resistance is met. Push each outer side of the Modular Card with equal pressure until the Modular Card seats into backplane connector. LED's on the Modular Card will light when properly connected. Tighten Modular Card thumbscrews until snug. DO NOT over tighten thumbscrews as they will break or the threads on the LP-2403 PoE Chassis may become

stripped. Check to make sure each Modular Card installed into the LP-2403 Chassis has its power LED's lit Green. Make sure any Modular Card without lit power LED's is installed snugly into the LP-2403 Chassis backplane and the thumbscrews are hand tightened.

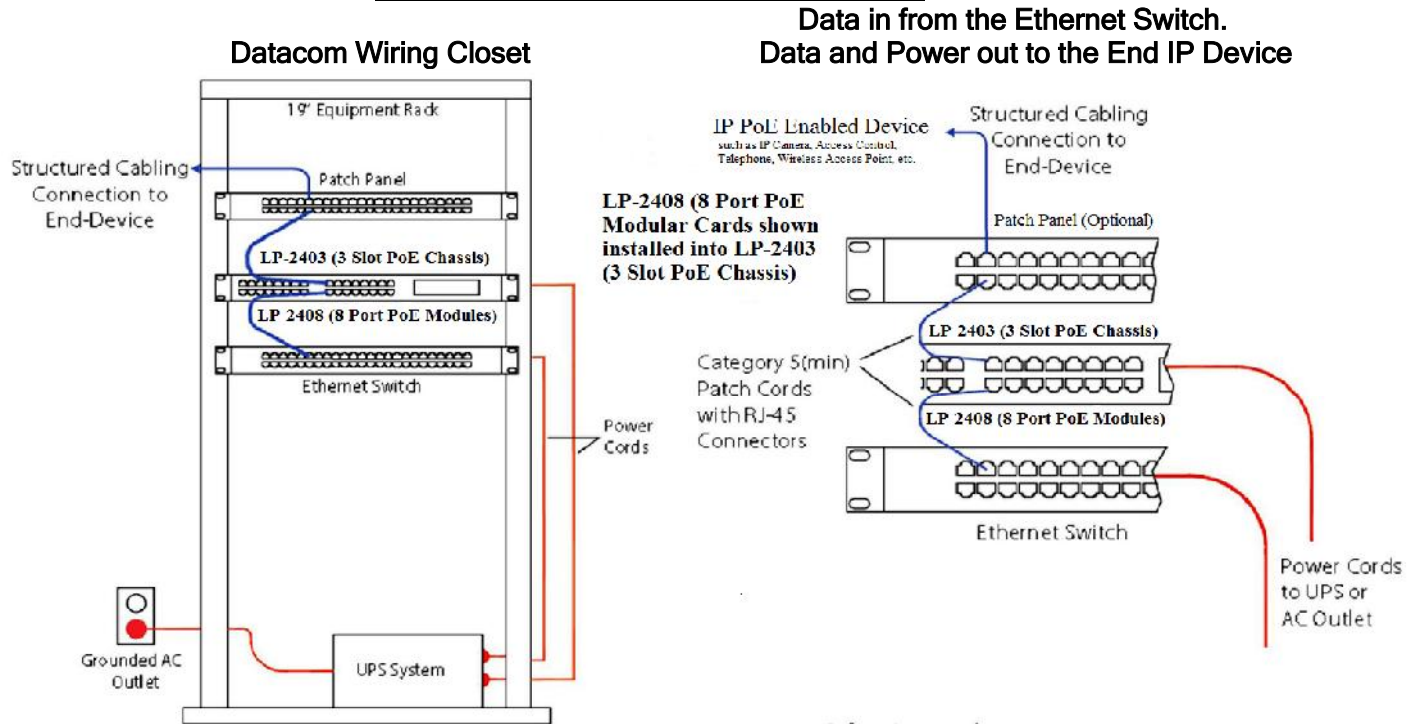


Next, attach a LAN data patch cable patch cord, of minimum Cat5 cable grade from the Ethernet Switch port to the RJ45 connector from a Modular Card Port marked "IN". Then attach a second patch cable from the "OUT" RJ45 connector on the same Modular Card port to the structured wiring connection leading to the device to be powered. Turn on the power source. The "IN" power LED will glow "GREEN". If the End Device to be powered is already installed on the Network, the "OUT" LED will glow steady "BLUE". The LP-2403 PoE Chassis and Modular Cards are now correctly installed and operating.

**Safety Instructions:** The means of connection to the mains power supply is the detachable power cord of the equipment. The equipment disconnect device is the appliance inlet. The AC/Mains socket outlet shall be installed near the equipment and shall be easily accessible.

**LED indicators and functions:** Each Module port has its own LEDs which display the following: GREEN-ON Solid: Power available from the LP-2403 PoE Chassis GREEN-OFF: No Power available from the LP-2403 Chassis (check AC Power Cord is connected to functioning AC/Mains outlet) BLUE-FLASHING: No Device connected to the port and port available to deliver up to 18 watts power (on LP-2408 - 8 Port Modular Card) or up to 36 watts power (on LP-2404 - 4 Port High Power Modular Card) BLUE-OFF: Device connected but no power is flowing to the device (incorrect match between device power requirement and 48vdc IEEE 802.3af and/or 802.3at PoE Standard)

### TYPICAL INSTALLATION DIAGRAMS



### Two Year Limited Warranty

LAN Power Systems warrants to the original consumer or purchaser that each of its products, and all components thereof, will be free from defects in material and/or workmanship for a period of 2 (two) years from the original purchase date. Any warranty hereunder is extended only to the original consumer or purchaser and is not assignable.

### Notice to User

LAN Power Systems reserves the right to make changes in specifications and other information contained in this document and its web site(s) without prior notice. The reader should in all cases consult LAN Power Systems to determine whether any such changes have been made. The hardware described in this document is subject to change without notice due to market conditions and/or user requirements.

### Safety Approvals

The equipment meets the following safety approvals:

For more information please contact



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