

CopperLink™ Model 1314MDE **Ruggedized Multi-Drop Ethernet Extender & Repeater**

Quick Start Guide



Important — This is a Class A device and is intended for use in a light industrial environment. It is not intended nor approved for use in an industrial or residential environment.

REGULATORY MODEL NUMBER: 03340D4-001



- Do not open the device when the power cord is connected. For systems without a power switch and without an external power adapter, line voltages are present within the device when the power cord is connected.
- For devices with an external power adapter, the power adapter shall be a listed *Limited Power Source*. The mains outlet that is utilized to power the device shall be within 10 feet (3 meters) of the device, shall be easily accessible, and protected by a circuit breaker in compliance with local regulatory requirements.
- For AC powered devices, ensure that the power cable used meets all applicable standards for the country in which it is to be installed.
- For AC powered devices which have 3 conductor power plugs (L1, L2 & GND or Hot, Neutral & Safety/Protective Ground), the wall outlet (or socket) must have an earth ground.
- For DC powered devices, ensure that the interconnecting cables are rated for proper voltage, current, anticipated temperature, flammability, and mechanical serviceability.
- WAN, LAN & PSTN ports (connections) may have hazardous voltages present regardless of whether the device is powered ON or OFF. PSTN relates to interfaces such as telephone lines, FXS, FXO, DSL, xDSL, T1, E1, ISDN, Voice, etc. These are known as "hazardous network voltages" and to avoid electric shock use caution when working near these ports. When disconnecting cables for these ports, detach the far end connection first.
- Do not work on the device or connect or disconnect cables during periods of lightning activity.



This device is NOT intended nor approved for connection to the PSTN. It is intended only for connection to customer premise equipment.



In accordance with the requirements of council directive 2002/96/EC on Waste of Electrical and Electronic Equipment (WEEE), ensure that at end-of-life you separate this product from other waste and scrap and deliver to the WEEE collection system in your country for recycling.

1.0 Configure the DIP Switches

To use DIP-switch configuration, you must first set the DIP switches to a position other than all OFF or all ON before powering-up the CopperLink. To configure your CL1314MDE using the DIP switches, refer to the section entitled “Hardware (DIP-switch) configuration” in the *CopperLink Model 1314MDE User Manual*.

2.0 Power up the CL1314MDE

The CL1314MDE comes with either an external AC or external DC power supply.

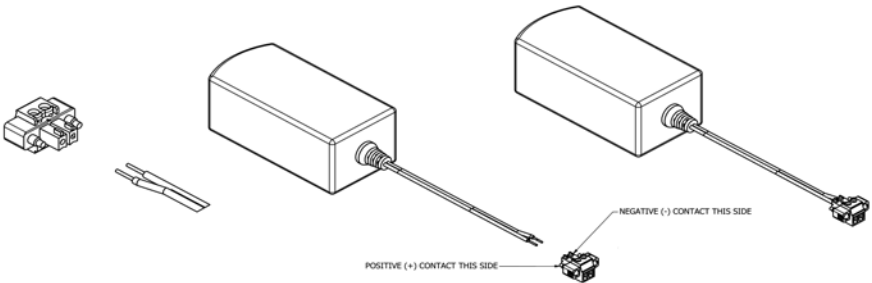


Figure 1. Power Supply Installation

2.1 Models with external AC adapter

To connect the AC power supply, determine the positive lead and negative lead on the power adapter. Insert the positive lead into the opening on the terminal block labeled + and the negative lead into the opening on the terminal block labeled -. Tighten the screws on the block to secure the wires. The CL1314MDE powers up as soon as it is connected to an AC power source—there is no power switch.

2.2 Models with external DC power supply

The 36-60 VDC DC to DC adapter is supplied with the DC version of the CL1314MDE. The black and red leads on one end of the power supply plug into a DC source (nominal 48VDC), and the leads on the other end connect to the terminal block power connector on the CL1314MDE.

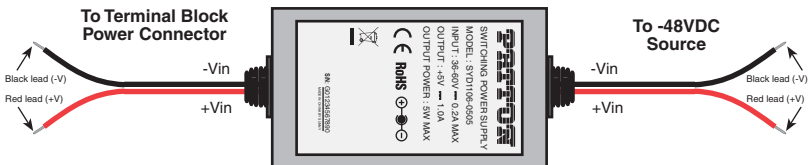


Figure 2. DC Power Supply

2.3 Power up indication

Verify that the *Power* LED on the front panel illuminates and remains lit.

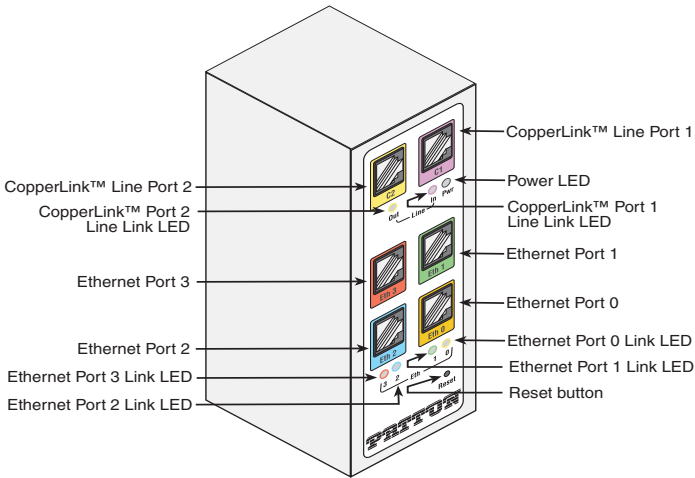


Figure 3. CL1314MDE front panel

3.0 Connect the CopperLink interface

These units work in pairs with any CL1314 model. Every local CopperLink port should connect to a remote CopperLink port.

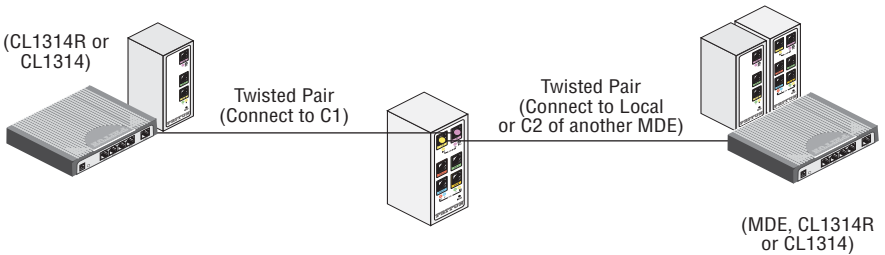


Figure 4. Local to Remote Connection

1. Obtain single-twisted-pair cable with an RJ-45 plug connector at each end.
2. Plug one end of the cable into the RJ-45 socket (labeled *C1* or *C2*) on the CopperLink. Verify that the other end of the cable is connected to the *Line* port on other CopperLink 1314 and that the port is correctly configured.
3. When a link is established, the *Line Link* LED will turn on.

4.0 Connect the Ethernet port(s)

The RJ-45 ports labeled *Eth 0*, *Eth 1*, *Eth 2*, and *Eth 3* are the Auto-MDIX 10/100Base-T interfaces. These ports are designed to connect directly to a 10/100Base-T device or network. You may connect this port to a hub or PC using a straight through or crossover cable that is up to 328 ft long.

5.0 Additional information

For detailed information about installing, configuring, and operating the CopperLink, refer to the *CopperLink Model 1314MDE User Manual* at www.patton.com/manuals/CL1314MDE.pdf.

A.0 Compliance Information

A.1 Compliance

EMC:

- FCC Part 15, Class A
- EN55022, Class A
- EN55024

Safety:

- UL 60950-1/CSA C22.2 NO. 60950-1
- IEC/EN60950-1

1.2 Radio and TV Interference (FCC Part 15)

This equipment generates and uses radio frequency energy, and if not installed and used properly—that is, in strict accordance with the manufacturer's instructions—may cause interference to radio and television reception. This equipment has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection from such interference in a commercial installation. However, there is no guarantee that interference will not occur in a particular installation. If the equipment causes interference to radio or television reception, which can be determined by disconnecting the cables, try to correct the interference by one or more of the following measures: moving the computing equipment away from the receiver, re-orienting the receiving antenna, and/or plugging the receiving equipment into a different AC outlet (such that the computing equipment and receiver are on different branches).

A.3 EC Declaration of Conformity

(See section A.4 “EG-Konformitätserklärung” for German version.)

Product Description: CopperLink Model 1314MDE

This equipment conforms to the requirements of Council Directive 1999/5/EC on the approximation of the laws of the member states relating to Radio and Telecommunication Terminal Equipment and the mutual recognition of their conformity.



The safety advice in the documentation accompanying the products shall be obeyed.
The conformity to the above directive is indicated by the CE sign on the device.

The signed Declaration of Conformity can be downloaded from www.patton.com/certifications/.

A.4 EG-Konformitätserklärung

(see section A.3 “EC Declaration of Conformity” for English version)

Produktbezeichnung: CopperLink Model 1314MDE

Die bezeichneten Produkte stimmen in der von uns in Verkehr gebrachten Ausführung mit den Vorschriften folgender Richtlinie überein:

R&TTE 1999/5/EG

Richtlinie des europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über Funkanlagen und Telekommunikations-Einrichtungen und die gegenseitige Anerkennung ihrer Konformität.



Die Sicherheitshinweise in der mitgelieferten Produktdokumentation sind zu beachten.
Die Konformität mit der oben erwähnten Richtlinie wird durch das CE-Zeichen auf dem Gerät bestätigt.

Die unterzeichnete Konformitätserklärung kann heruntergeladen werden von: www.patton.com/certifications/.

A.5 Authorized European Representative

D R M Green

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Patton support headquarters in the USA

- Online support: Available at www.patton.com
- E-mail support: E-mail sent to support@patton.com will be answered within 1 business day
- Telephone support: Standard telephone support is available five days a week — from 8:00 am to 5:00 pm EST (1300 to 2200 UTC/GMT)—by calling +1 (301) 975-1007
- Support via VoIP: Contact Patton free of charge by using a VoIP ISP phone to call [sip:support@patton.com](tel:sip:support@patton.com)
- Fax: +1 (253) 663-5693

Alternate Patton support for Europe, Middle East, and Africa (EMEA)

- Telephone support: Standard telephone support is available five days a week — from 8:00 am to 5:00 pm CET (0900 to 1800 UTC/GMT)—by calling +41 (0)31 985 25 55
- Fax: +41 (0)31 985 25 26

Note For additional service and support information, refer to the “Contacting Patton for assistance” chapter of the *CopperLink Model 1314MDE User Manual* available online at www.patton.com/manuals/CL1314MDE.pdf.

Warranty, Trademark, & Compliance Information

For warranty, trademark and compliance information, refer to the *CopperLink Model 1314MDE User Manual* available online at www.patton.com/manuals/CL1314MDE.pdf.

