NVT PHYBRIDGE
PoLRE LPC
DATASHEET

Fast Ethernet and PoE over Single-Pair UTP with up to 1,200ft (365m) Reach

PoLRE® Unmanaged Switch

The plug and play PoLRE LPC unmanaged switch makes the modernization to IP devices (IoT) simple, secure and cost-effective. When paired with the PhyLink Adapters, this powerful enterprise-grade switch delivers fast Ethernet and PoE over Single-Pair UTP cable with up to 1,200ft (365m) reach - **that's 4Xs the reach of standard Ethernet switches.**

With the PoLRE LPC, customers are taking full advantage of Modern LAN principles, protecting existing infrastructure assets, and eliminating any need to rip and replace the established Single-Pair UTP cabling. The PoLRE LPC unmanaged switch optimizes network design with advanced interoperability and easy integration into the overall LAN creating a secure, robust path for IP endpoints.

- Accelerate your return on investment by reducing infrastructure costs.
- Simplify your IP modernization, collapsing planning and deployment time.
- Eliminate infrastructure barriers, risks, disruption and costs.
- Create a robust plug-and-play IP platform that is easy to deploy and manage.
- Be environmentally responsible during your IP upgrades.

Speed, Reach and Power

PoLRE LPC delivers 10Mbps symmetrical (full duplex) and PoE over Single-Pair UTP with 1,200ft (365m) reach, providing substantial power to support bandwidth demanding IP cameras easily and reliably.

Simple Deployment

PoLRE LPC comes preconfigured and ready to deploy, making modernization to IP quick and efficient in organizations of every size. Modernizing multiple sites is greatly simplified with a repeatable, predictable and scalable deployment methodology across every location.

AT A GLANCE

(NV-PL-08)

- 8-port plug-and-play long reach PoE switch
- 10Mbps symmetrical (full duplex) and PoE (15W) over single-pair UTP with 1,200ft (365m) reach
- 2 x 100Mbps uplink ports
- 110W external power supply

CHARIOT
by NVT Phybridge

PoLRE LPC Unmanaged Switch Technical Specifications

Model	PoLRE LPC
Part Number	NV-PL-08
Dimensions	• 1.77" x 7.01" x 4.72" (HxWxD) • 4.5cm x 17.8cm x 12cm (HxWxD)
Weight	(0.679 lbs) 0.308 kg
Interface: Ethernet Uplink (Trunk IP)	2 RJ45 ports: 10/100 Base-T auto-sensing, independent speed selection, Ethernet IEEE 802.3, CAT5 copper cable
Interface: Downlink (PoE and IP to Adapter)	8 x RJ11 Jacks Maximum Distance: 1200ft (365 m) CAT3 UTP cable, 24 AWG Speed: 10 Mbps (full duplex) Power: 15 Watts

Power Supply	55VDC 2A (110W) power supply included
Power Consumption	2.9W
Power Injection (PoE)	55VDC; Endpoint devices must be compliant with IEEE 802.3af
Operating temperature	14°F to 115.6°F (-10°C to 45.5°C)
Humidity	10% to 95% (non-condensing) at 95°F (35°C)
Mounting	Standalone or rack mount
Rack Mount	Model NV-PL-RMEC10

PoLRE LPC Compliance and Agency Approval

EMC	Emissions: FCC Part 15, ICES-003, EN 55032:2012, Class A Immunity: EN 55024:2010
Safety	UL 60950-1 2nd Ed 2014-10-14, CAN/CSA C22.2 No. 60950-1-07 2nd Ed 2014-10 IEC 62368-1:2014, EN 62368-1:2014, AS/NZS 62368.1:2018
Environment	RoHS Directives 2011/65 and 2015/863

Power & Distance Table

PoLRE LPC used with PhyLink							
	20ft (6m)	200ft (61m)	400ft (122m)	600ft (183m)	800ft (244m)	1,000ft (305m)	1,200ft (365m)
Cat6 1-Pair	20	19	18	17	15	14	13
Cat5e 1-Pair	20	19	17	15	13	11	10
Cat3 1-Pair	20	19	17	15	13	11	9

10Mbit

PoLRE FAMILY ADAPTER

There is one adapter available to pair with the PoLRE family of switches to extend PoE over Single-Pair UTP.

PhyLink

PhyLink Adapter Technical Specifications

Model	PhyLink Adapter
Part Number	NV-PL-PA-011-6 (sold as 6 pack)
Dimensions	• 0.71" x 1.1" x 2.56" (HxWxD) • 1.8cm x 2.8cm x 6.5cm (HxWxD)
Weight	Weight: 0.78 oz. (22 g)
Interface: PoLRE Switch Side	1 RJ11 port: CAT3 unshielded single twisted pair cable. Between the wall plate and adapter, you can reuse the existing line cord when doing a DNIC/POTS displacement.
Interface Ethernet side: for IP endpoint device	1 RJ45 port: 10 Base-T

Power Consumption	0.9W
Power Injection (PoE)	DC voltage on RJ45 port: • 54V max • 37V when 1200ft (365m) away from its PoLRE Switch powers Class 1, Class 2 and some Class 3 IEEE 802.3af compliant IP devices
Operating temperature	32°F to 104°F (0°C to 40°C)
Humidity	10% to 95% (non-condensing) at 95°F (35°C)
Casing	Plastic
Wattage Delivery	15W

PhyLink Adapter Compliance and Agency Approval

EMC	Emissions: FCC Part 15, ICES-003, EN 55032:2012 Class B Immunity: EN 55024:2010
Safety	UL 60950-1 2nd Ed, CAN/CSA C22.2 No. 60950-1-07 IEC 62368-1:2014, EN 62368-1:2014, AS/NZS 62368.1:2018
Environment	RoHS Directives 2011/65 and 2015/863