Datasheet: PoLRE LPC (NV-PL-08)

PoLRE[®] LPC Unmanaged Switch

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



The plug and play <u>PoLRE LPC unmanaged switch</u> makes the modernization to IP devices (IoT) simple, secure and cost-effective. When paired with the PhyLink Adapters, this powerful enterprise-grade switch delivers 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.



PoE over Single-Pair UTP Cable up to 1,200ft (365m)

AT A GLANCE

(NV-PL-08)

- 8-port plug-and-play long reach PoE switch
- 10Mbps symmetrical (full duplex) and PoE (22W) over single-pair UTP with 1,200ft (365m) reach
- 2 x 100Mbps uplink ports
- 110W external power supply



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PoLRE LPC Unmanaged Technical Specifications

Model	PoLRE LPC			
Part Number	NV-PL-08			
Dimensions	 4.72" x 7.01" x 1.77" (LxWxH) 12cm x 17.8cm x 4.5cm (LxWxH) 			
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: 22 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

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	Emissions: FCC Part 15, ICES-003, EN 55032:2015
EMC	Class A
	Immunity: EN 55035:2017
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	18	17	16	15	14	13	12	
Cat5e 1-Pair	18	17	16	15	14	13	12	
Cat3 1-Pair	18	16	15	14	13	11	10	

10Mbit

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PoLRE Family Adapter Options

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-PLLK-6 (Sold as 6 pack)			
802.1x Support	Supported			
Dimensions	 2.56" x 1.1" x 0.71" (LxWxH) 6.5cm x 2.8cm x 1.8cm (LxWxH) 			
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: 58V 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	22W			

PhyLink Adapter Compliance and Agency Approval

	Emissions: FCC Part 15, ICES-003, EN 55032:2015	
EMC	Class B	
	Immunity: EN 55035:2017	
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	ironment RoHS Directives 2011/65 and 2015/863	