PoE Connections *in Far Places* Made Simple

CHARI☉T
by NVT Phybridge

Introducing the CHARIoT Series of Industry Leading Long Reach PoE Switches

FLEX	CLEER	PoLRE
2 or 4 Pair UTP	Coax	1 Pair UTP

MANAGED AND UNMANAGED POE SWITCHES & POE EXTENDERS

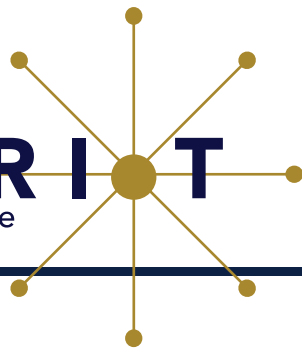POWER OVER LONG REACH ETHERNET OVER SINGLE PAIR OR MULTI PAIR UTP & COAX

ENTERPRISE GRADE FEATURES AND CAPABILITIES

ROBUST POWER AND POWER MANAGEMENT FEATURES

SIMPLE NETWORK MANAGEMENT INTERFACE

TWO FIBER AND TWO ETHERNET GIGABIT UPLINK PORTS

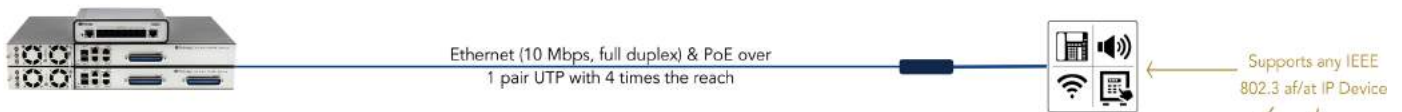IP MIGRATION MADE COST EFFECTIVE, SIMPLE AND ROBUST

The world is moving to the Internet of Things (IoT). For the physical security and communication industries that means delivering power and connectivity to new IP end points. For many, this requirement is often the biggest barrier to progress. Not any more.

The CHARIoT series of long reach PoE switches offered by NVT Phybridge allows businesses to transform their existing infrastructure and migrate to IP with confidence. Enabling IP end points is quick, easy and cost effective thanks to the CHARIoT series of switches.
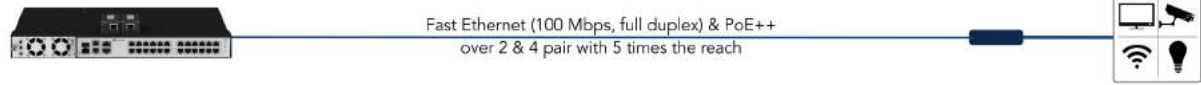
Benefits include:

- Accelerating your return on investment by reducing infrastructure costs.

- Collapse planning and deployment time.

- Eliminate infrastructure barriers, risks, disruption and costs.

- Create a robust IP platform that is easy to configure, deploy and manage.
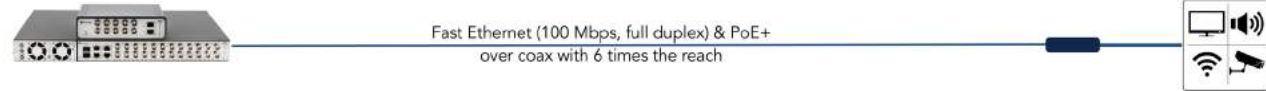

PoLRE 24,48 & LPC Switches

Ethernet (10 Mbps, full duplex) & PoE over 1 pair UTP with 4 times the reach

Supports any IEEE 802.3 af/at IP Device

FLEX 24 & 8 Port Switches

Fast Ethernet (100 Mbps, full duplex) & PoE++ over 2 & 4 pair with 5 times the reach

CLEER & EC 10 Switches

Fast Ethernet (100 Mbps, full duplex) & PoE+ over coax with 6 times the reach

Standard PoE Switch

Multiple IDF closets with standard PoE switches required in each to achieve similar reach capabilities

IDF Closet

Industry Leading PowerWISE® Technology

In addition to long reach Ethernet connectivity the CHARIoT managed switches come standard with industry leading power capabilities. Features include; power sharing for redundancy, load balancing, AC/DC options, hot swappable power supply and auto sensing 100-240VAC delivering 500 to 1,000 watts of power. The CHARIoT series of switches are some of the most energy efficient switches on the market consuming less than 20 watts of power to operate.

Managed Switch with Plug-and-Play Option

The CHARIoT managed switches can operate in transparent mode functioning as a bridge allowing for plug-and-play deployment. As a managed switch, the CHARIoT series comes standard with high value features specifically designed for the security industry:

- Power management by port for easy reset of ports

- Port MAC locking for higher security and peace of mind

- Simple Network Manager; an intuitive web GUI that makes managing the switch a breeze.

C H A R I o T
by NVT Phybridge

CLEER (Coax Leveraged Ethernet Extended Reach)

- Delivers fast Ethernet (100Mbps, full duplex) and PoE+ (30 watts) over coax cable with 2000ft (610m) reach.
- Used for IP cameras, IPTV, IP Speakers, IP access control and other IoT end points.
- A 24 port enterprise grade managed switch, a 10 port unmanaged, and EoC Ethernet extender options are available.

CLEER 24 Port Managed Switch (NV-CLR-024)

- 24 x 30 watt downlink ports delivering 100 Mbps, full duplex over coax
- 2 x 1GB uplink ports that can be bonded together for higher bandwidth
- 2 x 1 Fiber uplink ports that can be bonded together for higher bandwidth
- Dedicated management and console ports
- Industry leading PowerWISE technology comes standard with CLEER 24
  - 500w (110v) or 1000w (220V) auto sensing power supply
  - AC/DC power source option
  - Power sharing for redundancy
  - Hot swappable power supply for easy replacement
  - Power management by port
- Intuitive easy to use GUI interface

EC 10 Port Unmanaged Switch (NV-EC-10)

- 10 downlink ports delivering 100Mbps full duplex
- 2 x 1 GB uplink ports
- 150 watt external power supply included

EC Link (NV-LNK-02) & EC Link + (NV-LNK-PLUS)

- Media converter adapter
- Can be locally powered for more PoE delivery
- Can be paired together as EoC extenders.

EC4 Port Adapter (NV-EC-4)

- Expands 1 coax cable to 4 PoE Ethernet ports
- Can be locally powered for more PoE delivery

Feature	CHARIoT	Most Others
100Mbps symmetrical full duplex with long reach	✓	✗
Layer 2 Management Features	✓	✗
Remote Switch Management	✓	✗
Port MAC Locking for Security	✓	✗
Hot Swappable, Power Sharing, AC/DC	✓	✗
2x1 GbE Copper/Fiber Uplink Ports	✓	✗
Management and Console Ports.	✓	✗
An Intuitive Web GUI	✓	✗

The CHARIoT Series of managed switches comes standard with more enterprise features than other long reach PoE solutions making them the most robust long reach PoE switches available.

PoLRE (Power over Long Reach Ethernet)

- Delivers Ethernet (10Mbps, full duplex) and PoE (15 watts) over 1 pair UTP with 1200ft (365m) reach.

- Used for IP phone, IP access control, IP Speakers, IP sensors and other low power devices.

- A 24 and 48 port managed switch, and 8 port unmanaged switch, are available.

PoLRE 24 and 48 Port Managed Switches (NV-PL-024 & NV-PL-048)

- 24 or 48 x 15 watt downlink ports delivering 10 Mbps, full duplex on 1 pair UTP
- 2 x 1GB uplink ports that can be bonded together for higher bandwidth
- 2 x 1 Fiber uplink ports that can be bonded together for higher bandwidth
- Dedicated management and console ports
- Industry Leading PowerWISE technology comes standard with PoLRE
    - 500w (110v) or 1000w (220V) auto sensing power supply
    - AC/DC power source option
    - Power sharing for redundancy
    - Hot swappable power supply for easy replacement
    - Power management by port
- Intuitive easy to use GUI interface

Phylink Adapter (NV-PL-PA-011-6)

- The Phylink adapter is a media converter
- The Phylink adapters are sold in 6 packs
- Used with PoLRE managed and unmanaged switches

PoLRE LPC 8 Port Unmanaged (NV-PL-08)

- 8 Downlink ports delivering 10 Mbps, full duplex
- 2 RJ45 ports: 10/100 Base-T auto-sensing
- NV-PL-08 comes with switch, 2 phylink adapters and 100 watt power supply

QUICK, EASY AND COST EFFECTIVE MIGRATION TO IP END POINTS & INTERNET OF THINGS

SAVE

- Repurpose your existing infrastructure
- Eliminate IDF closet costs:
    - Backup power
    - Cooling
    - Rack space
- Reduced professional services costs
- Remote management eliminating the need for location visits while enhancing response times.
- Fast track your migration.

SIMPLE

- Switches designed for plug-and-play deployment or managed options.
- Eliminate risk and disruption by leveraging existing proven infrastructure.
- Point-to-point design of infrastructure allows for a graceful migration on your terms.
- No dependencies or impact on production network—build a separate LAN for IP Security or extend your LAN in a highly secure and simple manner.

ROBUST

- Long reach Ethernet technology reducing latency vs. DSL and Homeplug based solutions.
- Industry leading GUI interface making configuration, troubleshooting and management simple and effective.
- Enhanced security capabilities:
    - Physical separate LAN
    - Out-of-band management ports
    - Port locking eliminating access to the network.

FLEX

- Delivers fast Ethernet (100Mbps, full duplex) and PoE++ (50 watts) over 2 or 4 pair UTP with 1600ft (488m) reach.
- Used for IP cameras, IP Wi-Fi, IPTV and other high power IP end points.
- A 24 port enterprise grade managed switch, an 8 port unmanaged switch, and Ethernet extender options are available.

FLEX 24 Port Managed Switch (NV-FLX-024)

- 24 x 50 watt downlink ports delivering 100 Mbps, full duplex over 2 or 4 pair UTP.
- 2 x 1GB uplink ports that can be bonded together for higher bandwidth
- 2 x 1 Fiber uplink ports that can be bonded together for higher bandwidth
- Dedicated management and console ports
- Industry Leading PowerWISE technology comes standard with FLEX
    - 500w (110v) or 1000w (220V) auto sensing power supply
    - AC/DC power source option
    - Power sharing for redundancy
    - Hot swappable power supply for easy replacement
    - Power management by port
- Intuitive easy to use GUI interface

FLEX 8 Port Unmanaged Switch (NV-FLX-08)

COMING SOON

- 8 downlink ports delivering 100Mbps full duplex
- 2 x 1 GB uplink ports
- 150 watt external power supply included

FLEX Link (NV-FLXLK) & FLEX Link + (NV-FLXLK-PLUS)

- Media converter adapter
- Can be locally powered for more PoE delivery
- Can be paired together as Ethernet extenders.

FLEX 4 PORT ADAPTER (NV-FLX-4)

COMING SOON

- Expands 1 UTP cable to 4 PoE Ethernet ports
- Can be locally powered for more PoE delivery

The CHARIoT Series of managed switches comes standard with a simple yet powerful GUI interface making configuration, trouble shooting and management a breeze.

- Power management by port
- Port locking for security
- VLAN
- Telnet, HTTP, SNMP and other services available
- Packet traffic details
- Plus much more

Switch details updated in real-time

Visual elements simplifying management

Port locking for higher security

Port labeling for identification ease

Switch Power Consumption and budget Summary

Port Statistics

Quick power management by port

Detailed port statistics for easy troubleshooting

About Us

NVT PHYBRIDGE

NVT and Phybridge have joined forces to become one. The newly formed NVT Phybridge is the leader in long reach PoE (Power over Ethernet), making IP connections in far places simple. Our CHARIoT series of long reach switches help our customers migrate to an IP-based network, transforming the existing or new infrastructure into an IP path with power. We are a North American based technology company with global reach dedicated to practical innovation. Our number one priority is bringing solutions to market that are technologically advanced as well as practical for the end-user.

Quick Facts

- We were the first company to introduce switch technology that delivers Ethernet and PoE over a single pair of wire with four times the reach of traditional switches.

- The award-winning CHARIoT series PoLRE, CLEER and FLEX switches deliver Ethernet and power 4 to 6 times the reach of traditional switches.

- There are over 400,000 global CHARIoT switch users, including government agencies, large universities, hospitals and hospitality brands.

- NVT Phybridge has been recognized by many organizations such as Gartner and CRN for our innovative IP Telephony, Unified Communications and Security solutions.

CHARIoT Switch Awards