

# **VPLS/EvPL smart demarcation site preparation guide intervals**

January 2021

**LUMEN<sup>®</sup>**

# Contents

- Key capabilities ..... 3
- Why do we deploy smart demarcation?..... 3
- Key specifications ..... 3
- Site preparation..... 4
- Mounting options..... 5

The Lumen EvPL/VPLS smart demarcation is network interface device (NID) deployed at all customer sites to provide end-to-end connectivity fault management and enables optional performance assurance with end-to-end SLAs.

- The NID is a customer premise device owned and installed by Lumen.
- The NID is installed and maintained at your sites and Ethernet network to interface (E-NNIs). Country limitations may apply.

## Key capabilities

- Supports 10/100/1000Mbps at each of your sites
- Provides intelligent loop-back capabilities and L2/L3 test traffic generator
- Enables end-to-end connectivity fault management
- Enables optional EvPL and VPLS service features
- Performance Management with end-to-end SLAs – Frame delivery, Frame delay (latency), Frame delay variation (jitter). Performance summary data is available via uCommand.

## Why do we deploy smart demarcation?

- Shows a clear demarcation between the providers' (Lumen and LEC) and your networks to quickly isolate service problems
- Provides end-to-end fault management and monitoring
- Provides TDM-like maintenance and troubleshooting tools
- Enables SLA monitoring and end-to-end reporting
- Delivers an optimal customer experience

## Key specifications

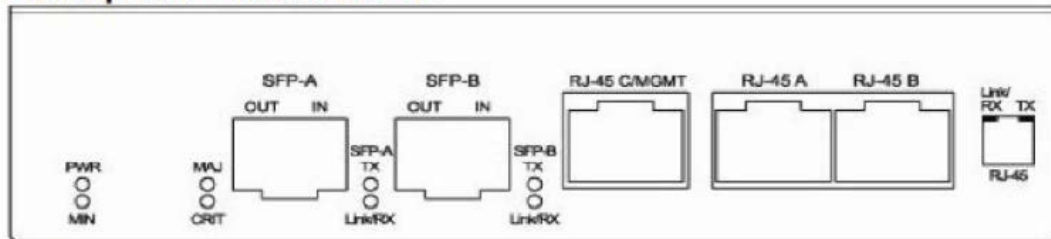


- 1.6" H x 5.34" W x 5.8" D
- 1.37lbs/627gm
- Max power (DC) 8W
- Max current (DC) 0.16A @ -48 VDC
- Input voltage (DC) -48 VDC to -60VD

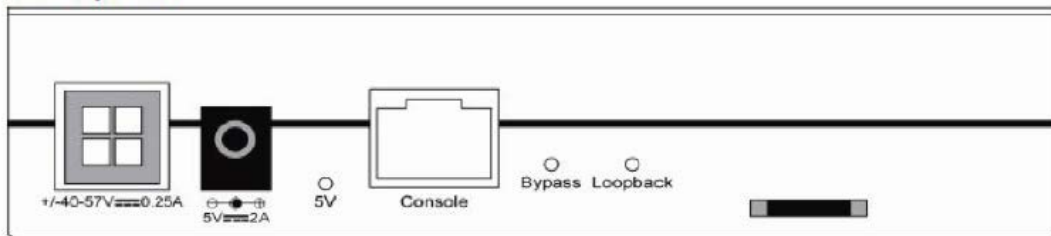
- Max power (AC) 8W
- Max current (AC) .07A @ 110 VAC, .032 @ 240 VAC
- Input voltage (AC) 100 to 240 VAC
- Temperature 32–104°F / 0–40°C

Fiber mode	Transmit power range (dBm)	Receive power range (dBm)
Single-mode fiber GE speed LS38-C3S-TC-N-D9	-12–0	-20–-3
Multi-mode fiber GE speed LM28-C3S-TX-N	-9.5–-4	-18–0
Single-mode fiber FE speed LS38-A3S-TXN-V1	-15–-8	-34–0
Multi-mode fiber FE speed LM28-A3S-TX-N-V1	-10–-4	-24–0

## Front panel - MetroNID TE



## Rear panel

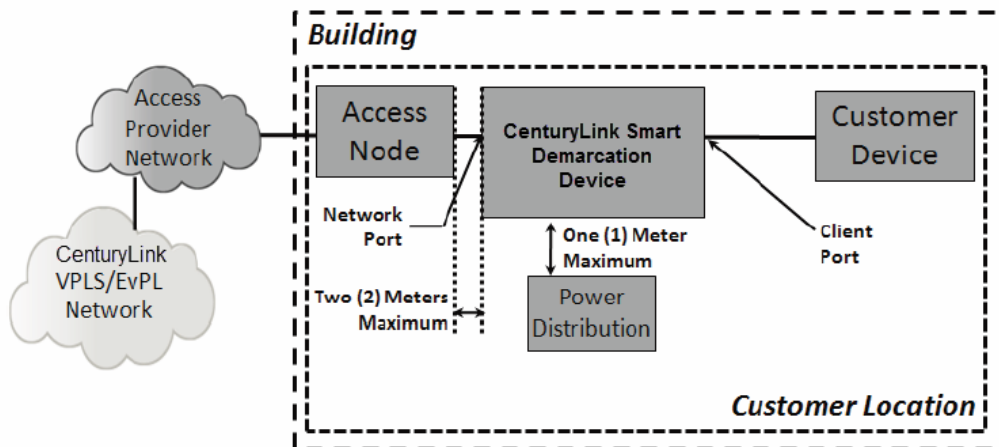


## Site preparation

To facilitate installation of the smart demarcation device, please ensure:

- Access is available to the site for the installer at the scheduled installation time(s).
- The appropriate personnel are on-site and available at the scheduled installation time(s).
- The following are ready: power distribution boxes, conduits, backboard or rack space for equipment mounting, grounding, surge and lightning protection and associated hardware and power outlets are within one meter of the smart demarcation device installation location.

- Inside telco circuit wiring is in place, including extensions and any necessary building alterations, so the smart demarcation device can be installed within two meters of the local access demarcation.
- The demarcation point of this installation is clearly marked to allow the installer to connect the correct circuit to the correct smart demarcation device interface.



## Mounting options

Lumen rack mounts the smart demarcation device as follows:

- Recessed 19"-inch rack mount 1U horizontal mounting bracket
- Fit in an ETSI rack using one pair of 1U ESTI to 10" flat conversion brackets. Alternatively, you can place the smart demarcation device on the desktop or other flat surface

