



## Passive Optical LAN Cost Comparison

Note: All costs are representative estimates only and not quotes or guarantees. Actual costs will vary based on numerous factors including, but not limited to, geographic region and local market issues.

(June 2020)

<b>POL Parameters</b>		<b>Traditional Parameters</b>		<b>4-Story Building, 90 Users per Floor</b>		<b>7-Story Building, 150 Users per Floor</b>		<b>4 Building Campus 6 Stories per Building, 180 Users per Floor</b>	
				<b>POL</b>	<b>Traditional</b>	<b>POL</b>	<b>Traditional</b>	<b>POL</b>	<b>Traditional</b>
4-Port PoE ONTs ONTs Shared in Cubicles 2x32 Splitters Zone Box Solution; No TRs		48-Port PoE Switches One 10G Uplink per TR Stacked Switches 2 Category 6 Drops per User							
Active Components	<u>POL Active Components</u>	<u>Traditional Active Components</u>							
	Core Uplink Optics Power System w/ UPS OLT Chassis OLT Uplink Cards OLT PON Card w/ Optics Zone Box w/ Splitters ONT Element Management System OLT UPS	16-Port 10G Expansion Module 10GBASE-SR Transceiver Module 48-Port PoE Layer 2 Switch 10GBASE-SR SFP+ Transceiver 4 x Gigabit Ethernet/2 x 10GE Module Element Management System UPS		\$238,173	\$251,520	\$548,905	\$860,905	\$2,100,439	\$2,819,460
Cabling	<u>POL Cabling Components</u>	<u>Traditional Cabling Components</u>							
	Uplink Fiber LC MTP Module Face Plates Pass-Through Modules OLT Patch Fiber Feeder Fibers Horizontal Fiber Patch Fiber Horizontal Cable Installation Labor Riser Installation Labor Install Zone Box	Uplink Fiber LC MTP Module Face Plates Patch Panels Trunk, 24 Fibers OM3, 100' Category 6 Cable with Installation 1U Fiber Patch Panel Riser Cable Installation Labor Cable Tray with Installation Install Racks Rack Patch cables		\$100,861	\$292,429	\$300,531	\$796,755	\$1,208,984	\$3,324,479
Labor	<u>POL Installation Labor</u>	<u>Traditional Installation Labor</u>							
	Install ONTs Provision System Provision ONTs	Rack & Stack Equipment Electronics Installation Labor Configure Switches		\$59,600	\$36,000	\$77,840	\$84,000	\$264,560	\$379,500
Facilities	<u>POL Facilities Costs</u>	<u>Traditional Facilities Costs</u>							
	none	Closet Construction HVAC Access Control		\$0	\$88,000	\$0	\$308,000	\$0	\$1,629,000
<b>Totals Cost</b>				<b>\$398,634</b>	<b>\$667,949</b>	<b>\$927,277</b>	<b>\$2,049,660</b>	<b>\$3,573,983</b>	<b>\$8,152,439</b>
<b>Total Ethernet Ports</b>				<b>1200</b>	<b>192</b>	<b>3480</b>	<b>2688</b>	<b>14320</b>	<b>9216</b>
<b>Average Cost/Port</b>				<b>\$332.20</b>	<b>\$3,478.90</b>	<b>\$266.46</b>	<b>\$762.52</b>	<b>\$249.58</b>	<b>\$884.60</b>
<b>POL Savings</b>					<b>40%</b>		<b>55%</b>		<b>56%</b>