



EZ ETHERNET

A simple, easy-to-connect alternative for
low-bandwidth ethernet access

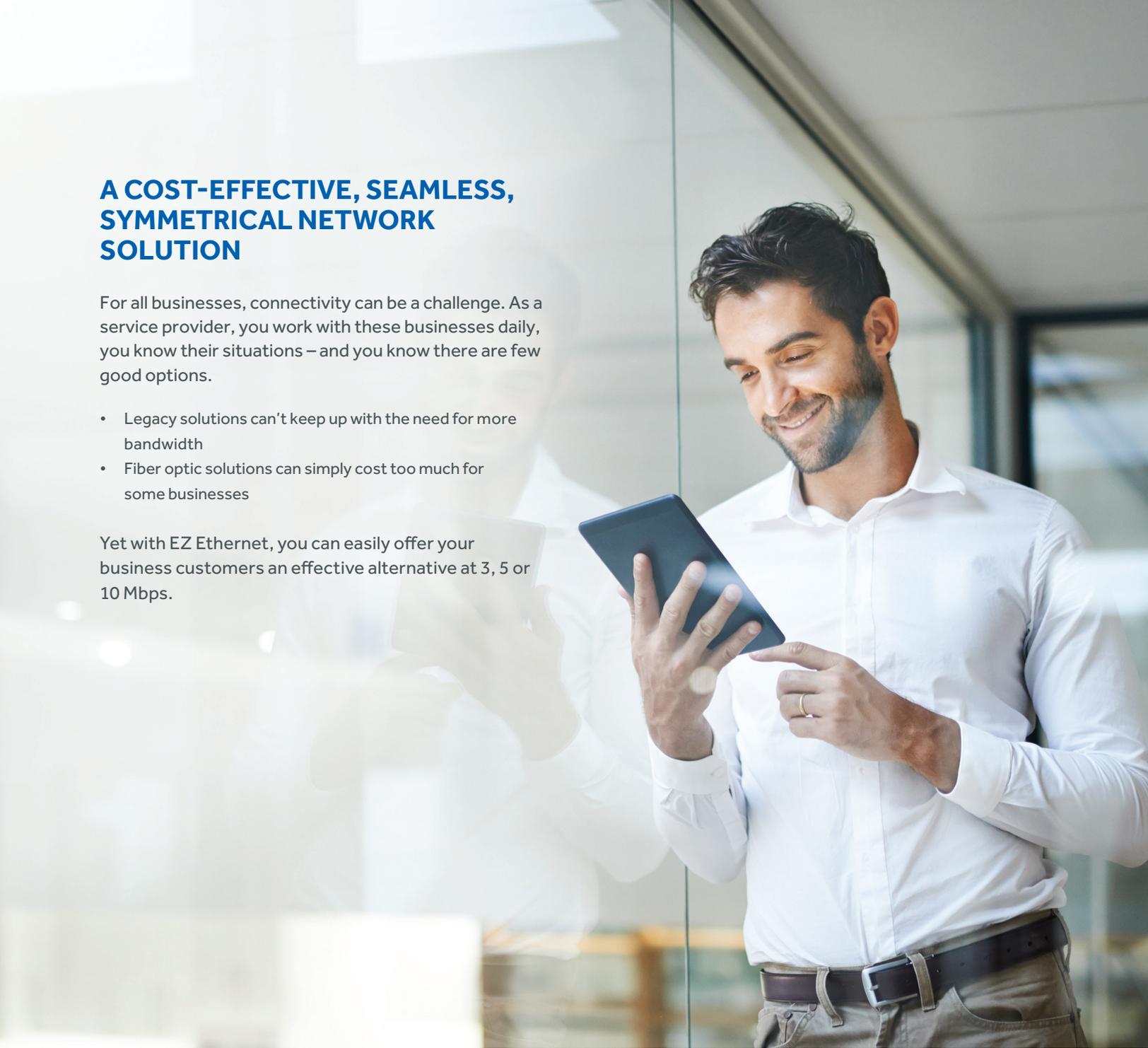


A COST-EFFECTIVE, SEAMLESS, SYMMETRICAL NETWORK SOLUTION

For all businesses, connectivity can be a challenge. As a service provider, you work with these businesses daily, you know their situations – and you know there are few good options.

- Legacy solutions can't keep up with the need for more bandwidth
- Fiber optic solutions can simply cost too much for some businesses

Yet with EZ Ethernet, you can easily offer your business customers an effective alternative at 3, 5 or 10 Mbps.



EZ ETHERNET

EZ Ethernet allows your customers to quickly connect multiple sites with a standard cable modem to instantly increase network bandwidth and reliability while lowering monthly and annual costs.

And no construction is needed for most business locations. Sparklight Business's expansive network already is available to more than 80 percent of the small- and medium-sized businesses in our footprint. This enables a fast, easy installation without the typical construction costs and lengthy timelines associated other solutions.



ADVANTAGES FOR YOU

Expanded Network Coverage

Serve new and existing customers across the entire Sparklight Business footprint in 21 states with the ability to use extensive coaxial infrastructure. This enhanced reach will utilize External Network-to-Network Interface (ENNI) ports to connect with EZ Ethernet.

Expanded Product Offering

EZ Ethernet lets you offer a low-cost alternative to fiber services for a seamless, symmetrical network solution with more flexibility and capacity than T1 lines or DSL.

Newer, Efficient Technology

EZ Ethernet will let you retire or replace obsolete TDM circuits with the convenience of Ethernet technology.

Cross-Market Connectivity

Connect across the United States between different Sparklight Business markets through a single Point-of-Presence (POP).

ADVANTAGES FOR YOUR CUSTOMERS

In any multi-site operation, connectivity between locations is always a top-of-mind concern. Even something as simple as sharing a server, a folder or a file becomes a challenge if your customers' available bandwidth has not kept pace with their needs.

Quick and Easy Connection

EZ Ethernet is an Ethernet solution that allows your customers to quickly connect multiple sites with a standard modem.

Highly Compatible Interface

EZ Ethernet is provided over a widely-available and well-understood Ethernet interface, which is compatible with virtually all networking equipment and hosts.

Easy Installation

Because Ethernet technology is so widely used and understood, EZ Ethernet will be easy for your customers to integrate into their existing network infrastructure.

Flexible Configurations

EZ Ethernet lets you and your customers choose different bandwidths for different locations, easily upgrade bandwidth up to 10 Mbps per location, or add new locations.

Improved ROI

With EZ Ethernet, you can help your customers drive down their technology costs while improving overall connectivity, productivity and operational efficiency.

Multiple Service Levels

Your customers can choose the bandwidth that best meets their needs – we offer several options including 3, 5 and 10 Mbps symmetrical service.

TECHNICAL OVERVIEW

EZ Ethernet is intended for Service Providers who need to extend the two port-based Ethernet services defined in MEF 6.1 and supported by the ENNI defined in MEF 26: Ethernet Private Line (EPL) and Ethernet Private LAN (EP-LAN).

Specific Service Attributes and Parameter Values

UNI Service Attributes

UNI Service Attributes	UNI Service Attributes
Physical Interface	1 Gbps
Speed	10/100/1000 Mbps
Mode	Full Duplex
MAC Layer	IEEE 802.3
MTU Size	≤1518 Bytes
Service Multiplexing	No
Bundling	No
All-to-one Bundling	Yes
CE-VLAN ID for Untagged and Priority Tagged Frames	Not Applicable
Maximum number of EVCs	=1
Layer 2 Control Protocol Processing	Pass to EVC or Discard

EVC Service Attributes

EVC Service Attributes	Possible Values
EVC Type	Point-to-Point
EVC MTU Size	≤ 1518 bytes and ≤ minimum of UNI MTU sizes
Maximum Number of UNIs	=2
CE-VLAN ID Preservation	Yes
CE-VLAN CoS ID Value Preservation	Yes
Unicast Frame Delivery	Delivered Unconditionally
Multicast Frame Delivery	Delivered Unconditionally
Broadcast Frame Delivery	Delivered Unconditionally
L2CP Processing	Tunnel or Discard as per Table 4
Performance Metrics	Class of Service Offering
Layer 2 Control Protocol Processing	Business Critical

EVC per UNI Service Attributes

EVC per UNI Service Attribute	Possible Values
Class of Service Identifier for Service Frames	Business Critical
Ingress Bandwidth Profile per EVC	CIR = 3, 5, 10 Mbps
	CBS ≥ maximum MTU
	EIR = 0 EBS = 0

OVC End-Point per ENNI Service Attributes

OVC EP per ENNI Service Attribute	Possible Values
Class of Service Identifier for ENNI Frames	Business Critical
Ingress Bandwidth Profile per OVC End Point at ENNI	CIR = 3, 10 Mbps, 1–10 Gbps, increments of 1 Gbps
	CBS ≥ 12176 bytes
	EIR = 0 EBS = 0

L2CP Processing for the E-Line Service

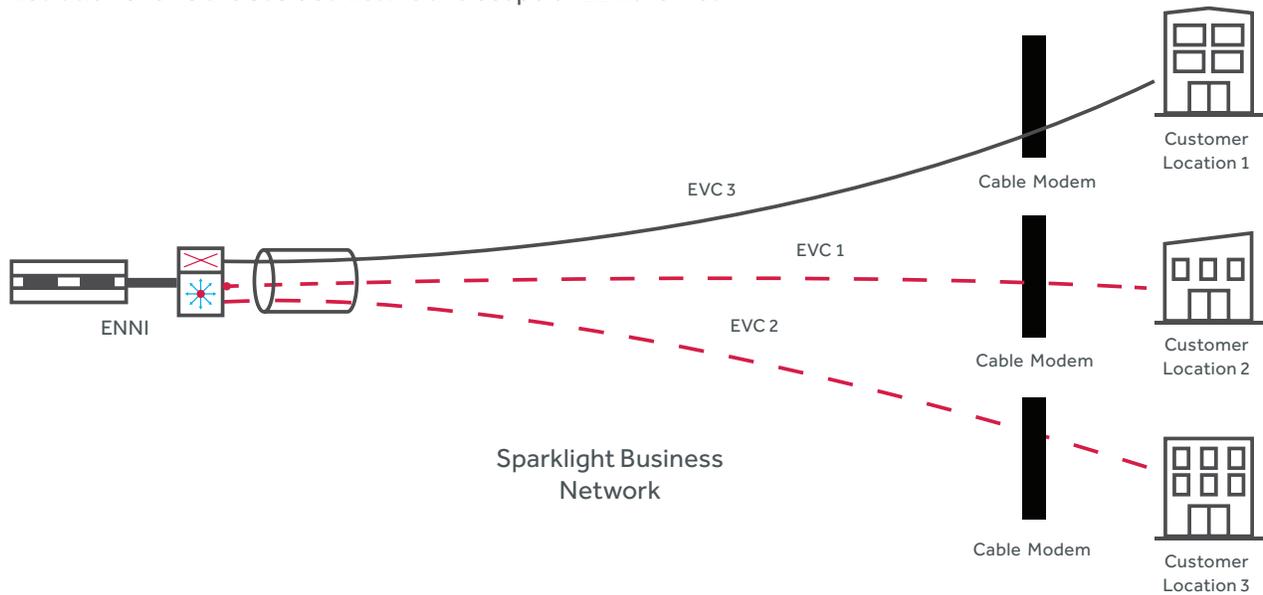
Protocol	MAC DA	L2CP Disposition
STP/RSTP/MSTP	01-80-C2-00-00-00	Tunnel
CDP	01-00-0c-cd-cd-d0	Tunnel
Pause	01-80-C2-00-00-01	Discard
LACP/LAMP	01-80-C2-00-00-02	Discard
Link OAM	01-80-C2-00-00-02	Discard
Port Authentication	01-80-C2-00-00-03	Discard
E-LMI	01-80-C2-00-00-07	Discard
LLDP	01-80-C2-00-00-0E	Tunnel
GARP/MRP Block	01-80-C2-00-00-20 through 01-80-C2-00-00-2F	Discard

OVC Service Attributes

OVC Service Attribute	Possible Values
OVC Type	Point-to-Point
MTU Size	≥1522 bytes
CE-VLAN ID Preservation	Yes
CE-VLAN CoS ID Value Preservation	Yes
S-VLAN ID Preservation	Yes
S-VLAN CoS ID Value Preservation	Yes
Color Forwarding	No
Performance Metrics	Class of Service Offering
	Business Critical
Unicast Frame Delivery	Delivered Unconditionally
Multicast Frame Delivery	Delivered Unconditionally
Broadcast Frame Delivery	Delivered Unconditionally
L2CP Processing	Agreed Upon Dropped-under Service Instance Passed-through dedicated port

HOW IT WORKS

This illustration shows the basic structure and scope of EZ Ethernet.



CARRIER/WHOLESALE PRICING

Symmetrical Speeds	Monthly Contract	1-Year Contract	3-Year Contract	5-Year Contract
3 Mbps x 3 Mbps	\$190.00/mo.	\$180.50/mo.	\$161.50/mo.	\$152.00/mo.
5 Mbps x 5 Mbps	\$274.00/mo.	\$260.30/mo.	\$323.90/mo.	\$219.20/mo.
10 Mbps x 10 Mbps	\$380.00/mo.	\$361.00/mo.	\$323.00/mo.	\$304.00/mo.



Talk with an Carrier Services adviser to see which solution is right for you.

Call us at (855) 381-6431 or email us at carrier.quotes@sparklight.biz

business.sparklight.com/carrier

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