

# 1000Base-SX / LX SFP PCI Express Fiber Adapter



## *High Performance, Boosts Network Traffic Speed and Flexible Distance Extension*

The PLANET ENW-9701 1000Base-X Fiber PCI-Express Ethernet adapter is ideal for high end servers to extend long distance network reliably and flexibly with up to 2000Mbps Full-duplex bandwidth capacity. It is an optimal solution for Ethernet applications by providing strict low-power budgets and small form factor.

## *Flexible Distance Option*

With the 1000Base-SX / LX SFP (Small-Form Factor Pluggable) interface support by the ENW-9701, the fiber network deployment distance can be extended from 550 meters (via Multi-mode fiber) up to above 10/20/30/40/50/70/120 kilometers (via Single-mode fiber, respectively). Users can choose the most suitable SFP Transceiver module depending on their needs. ENW-9701 connects your servers and workstations guarantees extremely high throughput and excellent signal quality.

## *More Bandwidth and Advanced Functions*

The ENW-9701 is designed to address high-performance system requirements. With the innovative PCI Express Bus Architecture, the ENW-9701 provides better bandwidth and performance than the network cards which based on 32/64bit PCI architecture. Moreover, the ENW-9701 supports IEEE 802.1Q VLAN which allows it to operate in a flexible and secure network environment. With 9K Jumbo Frame ability and IEEE 802.3 Flow Control support, it offers further optimizes throughput and wire-speed packet transfer performance without risk of packet loss. The high data throughput of the device makes it ideal for most Gigabit Ethernet environments.

## *Seamless Integration*

The ENW-9701 operates completely harmony with most of the server OS, enabling simple integration into network designs. There is no need of any modification to the server's operating system or any special software required for the ENW-9701 to be integrated into the system. The ENW-9701 can take the place of the Ethernet MAC of any conventional TCP connection and have the existing TCP/IP stack of server's CPU still kept intact. It requires only a simple, standard PCIe driver to connect the ENW-9701 to the software.

## KEY FEATURES

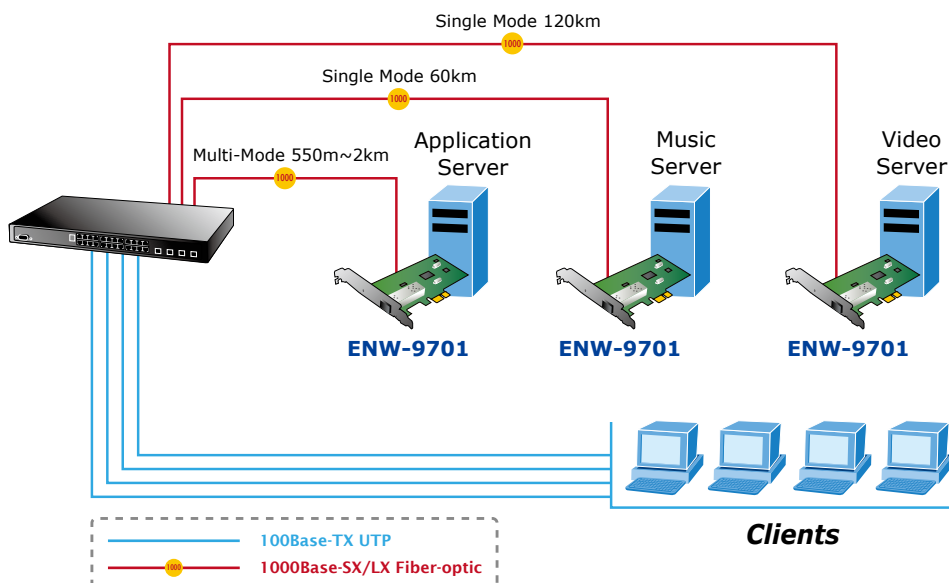
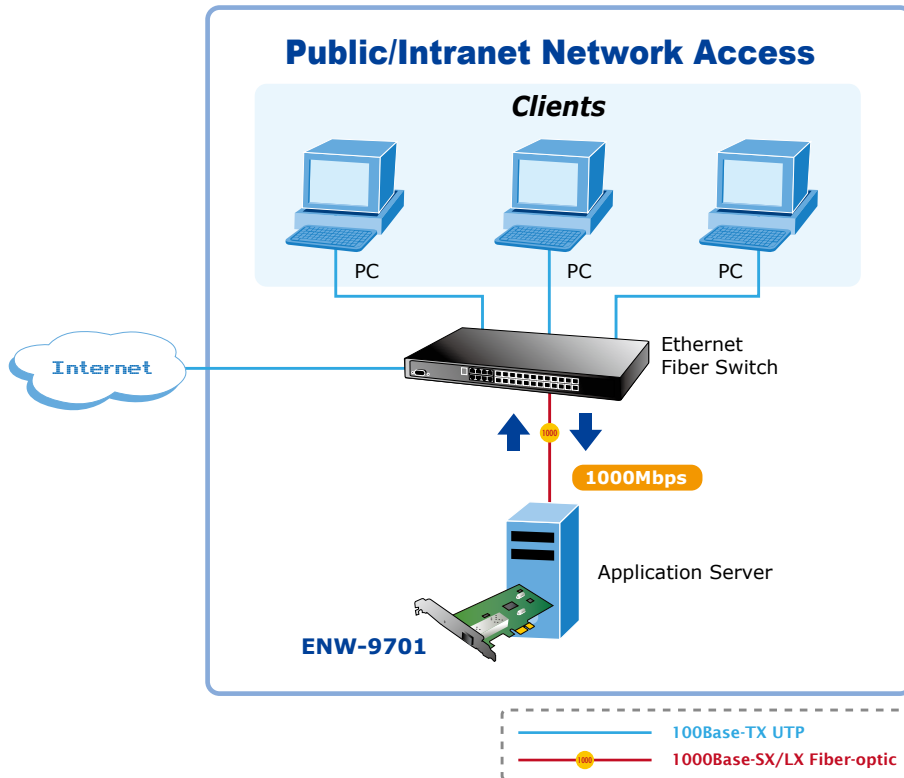
- One 1000Base-SX / LX SFP slot
- PCI Express x1 Host Bus interface
- 9K Jumbo Frame
- IP, TCP checksum offloading
- IEEE 802.1Q Tagged VLAN
- Low Power Consumption
- Windows XP/2003, Vista/2008, Win7, Linux, and MAC OS X Ready

**APPLICATIONS**

*Server NICs*

PLANET ENW-9701 equips one Gigabit SFP fiber connector which allows users to extend the network distances without any limitation and provides ten times performance than existing Fast Ethernet transmission and PCI Express 1.1 technology. The ENW-9701 can easily act as a server NICs of your networks by wiring to the backbone Switches and right for the main board with PCI Express now and future. The ENW-9701 is a highly cost-effective solution and the best choice for various Fiber Optic network applications upgrade, such as:

- High end server / Storage Server
- Industrial Computer
- Terminal Station
- POS Cash Register
- PC-based Video Recorder



**SPECIFICATION**

Product	1000Base-SX / LX SFP PCI Express Ethernet Adapter		
Model	ENW-9701		
<b>Hardware Specification</b>			
Attachment Interface	PCI Express Host Bus Interface, 1 lane PCI Express Rev 1.1		
Media Interface	SFP slot (LC Interface)		
Cabling Options	SFP LC connector : 50/125µm & 62.5/125µm Multi-Mode fiber cable 9/125µm Single-Mode cable		
Jumbo Frame	9Kbytes		
LED Indicators	Link / Active per port		
Dimension (W x D)	121.4 x 119.5mm		
<b>Advanced Function</b>			
Layer 2 Features	<ul style="list-style-type: none"> <li>• IEEE 802.3x Flow Control support</li> <li>• IEEE 802.1Q VLAN support</li> </ul>		
Performance enhancements	<ul style="list-style-type: none"> <li>• Receive-side scaling (RSS): Optimization for multiple CPUs under Windows OS control</li> <li>• Reduced host bus traffic</li> <li>• IP, TCP and UDP Checksum Offloading</li> <li>• Transmit / Receive On-Chip Buffer Support</li> <li>• IPv4, IPv6</li> </ul>		
OS Support	<ul style="list-style-type: none"> <li>• Windows Server 2003, Windows Server 2008</li> <li>• Windows XP, Windows Vista™, Windows 7</li> <li>• Linux 2.4, Linux 2.6, Linux 64-bit</li> <li>• Redhat Enterprise Linux 4.7 &amp; 5.3</li> <li>• Mac OS X 10.4, 10.5 and 10.6 Intel-based Mac computer</li> </ul>		
<b>Standards Conformance</b>			
Regulation Compliance	FCC Part 15 Class B, CE		
Standards Compliance	IEEE 802.3z	1000Base-X Gigabit Ethernet	
	IEEE 802.3x	Flow Control and Back pressure	
	IEEE 802.1Q	VLAN Tagging	
<b>Environment</b>			
Operating	Temperature:	0 ~ 65 Degree C	
	Relative Humidity:	5 ~ 95% (non-condensing)	
Storage	Temperature:	-10 ~ 85 Degree C	
	Relative Humidity:	5 ~ 95% (non-condensing)	

**ORDERING INFORMATION**

ENW-9701	1000Base-SX / LX SFP PCI Express Ethernet Adapter
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**AVAILABLE MODULES**

SFP Module List				
Model	Interface	Speed	Fiber connector and distance	Operating Temperature
MGB-SX	1000Base-SX	1000Mbps	LC, Multi-Mode (850nm) -220m/550m	0 ~ 50 Degree C
MGB-SX	1000Base-SX	1000Mbps	LC, Multi-Mode (850nm) -220m/550m	0 ~ 50 Degree C
MGB-SX2	1000Base-SX	1000Mbps	LC, Multi-Mode (1310nm) -2km	0 ~ 50 Degree C
MGB-LX	1000Base-LX	1000Mbps	LC, Single Mode (1310nm) - 10km	0 ~ 50 Degree C
MGB-L30	1000Base-LX	1000Mbps	LC, Single Mode (1310nm) - 30km	0 ~ 50 Degree C
MGB-L50	1000Base-LX	1000Mbps	LC, Single Mode (1310nm) - 50km	0 ~ 50 Degree C
MGB-L70	1000Base-LX	1000Mbps	LC, Single Mode (1550nm) - 70km	0 ~ 50 Degree C
MGB-TSX	1000Base-SX	1000Mbps	LC, Multi-Mode (850nm) -220m/550m	-40 ~ 75 Degree C
MGB-TLX	1000Base-LX	1000Mbps	LC, Single Mode (1310nm) - 10km	-40 ~ 75 Degree C
MGB-TL30	1000Base-LX	1000Mbps	LC, Single Mode (1310nm) - 30km	-40 ~ 75 Degree C
MGB-TL70	1000Base-LX	1000Mbps	LC, Single Mode (1550nm) - 70km	-40 ~ 75 Degree C