

# **Product Highlights**

#### **PCI Express Interface**

Provides more efficient performance and reliability than standard PCI and PCI-X interfaces

#### **High-speed Connection**

Experience up to 2000Mbps network speed over fiber-optic cable when connected in full duplex mode

#### **Versatile and Advanced Functions**

Supports VLAN, QoS, Jumbo Frames, and several advanced features for more efficient network management and transmission quality



# DGE-560SX Fiber Gigabit PCI Express Adapter

### Features

#### Connectivity

- IEEE 802.3z 1000BASE-SX standard
- Up to 550 m in multi-mode fiber cable
- PCI-E 2.0 interface with 5 GHz signaling
- 802.3x Flow Control and Full-Duplex operation
- Laser Eye Safety certified
- Hot-swappable for adding or replacing computer peripherals with minimal server interruption

#### **Advanced Functions**

- 9 KB Jumbo Frames
- 802.1p Priority Queue QoS
- 802.1Q VLAN Security
- ACPI 2.0 Power Management
- Simple Network Management Protocol Statistics
- D-Link Broadcom Advanced Control Suite for configurations
- Supports Card Teaming for load balancing and fault tolerance
- Supports Remote Boot (PXE and RPL)

D-Link's DGE-560SX Fiber Gigabit PCI Express Adapter is is a high-performance network card that lets businesses take advantage of the PCI Express (PCI-E) slots on their servers to enhance network performance with fiber-optic connectivity. The adapter's dedicated PCI-E input/output (I/O) bandwidth ensures priority performance for Gigabit Ethernet fiber-optic networks without requiring bus sharing for other devices.

## **Efficient PCI Express Interface**

The Fiber Gigabit PCI Express Adapter supports 2 Gbps data addressing to increase higher throughput requirements from the adapter's PC board to the server host. It provides unsurpassed robustness, reliability, and performance, and is the optimum I/O connectivity solution for a wide range of storage server devices. As the successor to the PCI and PCI-X interfaces, the PCI Express bus architecture eliminates many of the inefficiencies of parallel PCI and PCI-X architectures. With lower pin counts and lower power consumption requirements, the DGE-560SXPCI Express host bus adapter also reduces system-level power requirements.

### **Advanced Functions**

The DGE-560SX supports other advanced features, such as Jumbo Frames of up to 9 KB. It supports ACPI (Advanced Configuration and Power Interface) specifications to enable OS-directed configuration and Power Management (OSPM) to enumerate and configure server motherboards. The adapter supports an SNMP agent for management through an SNMP-based platform.



## VLAN & QoS Support

The DGE-560SX provides on-board screening of VLAN tagged Ethernet frames compliant with IEEE 802.1Q. This allows the server to operate in a flexible and secure network configuration in a standards-based environment. It supports 802.1p Priority Queues for improved delivery of time-sensitive data like voice and video.

## **High-Speed Fiber-Optic Connection**

Delivering up to 2000 Mbps transmission speeds in full-duplex mode over fiber-optic cable, the DGE-560SX brings ample bandwidth to servers. It reduces the host operating system overhead by offload IP header verification and TCP/UDP checksum for data received, allowing the servers to reserve more computing power for other complicated applications.



Technical Specifications			
General			
Standards	<ul> <li>IEEE 802.3z 1000BASE-SX Gigabit</li> <li>802.3x Flow Control</li> </ul>	• PCI-E 2.0 with 5 GHz Signaling	
Network Interface Connector	• 850 nm LC fiber-optical connector		
Installable PCI Slot	PCI Express x1/x4/x8/x16		
Functionality			
Network Media & Transmission Range	<ul> <li>62.5/125 micron multi-mode fiber cable: transmission distance of up to 275 m</li> </ul>	<ul> <li>50/125 micron multi-mode fiber cable: transmission distance of up to 550 m</li> </ul>	
Network Operation Mode	• Full Duplex (2000 Mbps)		
Data Transfer Rate	• Gigabit		
Supported Functions	<ul> <li>9 KB Jumbo Frame</li> <li>802.1p Priority Queue QoS</li> <li>802.1Q VLAN security, 64 groups</li> <li>ACPI 2.0 Power Management</li> </ul>	<ul> <li>SNMP Statistics</li> <li>Card Teaming</li> <li>Remote Boot</li> </ul>	
Drivers Supported	<ul> <li>Microsoft Windows 7 32/64bits</li> <li>Microsoft Windows Server 2008 32/64bits</li> <li>Microsoft Windows Vista 32/64bits</li> <li>Microsoft Windows 2003 server 32/64 bits</li> <li>Microsoft Windows XP 32/64 bits</li> </ul>	<ul> <li>Linux Kernel 2.4.x, 2.6.x</li> <li>NDIS2 for DOS</li> <li>Netware server 4.x , 5.x , 6.x</li> <li>Netware DOS ODI Client</li> </ul>	

# DGE-560SX Fiber Gigabit PCI Express Adapter

Physical			
Diagnostic LED	• Link/Activity		
Dimensions	• 68.5 x 68.9 mm (2.7 x 2.71 inches)		
Power Requirement	• 3.3 V		
Temperature	• Operating: 0 to 50 °C (32 to 122 °F)	• Storage: -20 to 70 °C (-4 to 158 °F)	
Humidity	• 5% to 90% non-condensing		
Certifications	• CE • FCC Class B • VCCI	• BSMI • C-Tick	
Order Information			
Part Number	Description		
DGE-560SX	Fiber Gigabit PCI Express Adapter		

Power outlets and electrical wiring must all be part of the same electrical system. Certain electrical conditions in your home, such as wiring condition and configuration, may affect the performance of this product. Additional D-Link Powerline AV series products are required to add new devices to the network. A minimum of two D-Link Powerline AV series products are required to create a network. Connecting this product to a power strip with a surge protector may adversely affect the performance of this product. For best results, plug the adapter directly into a wall outlet. Maximum throughput is based on theoretical transmission PHY rate. Actual data throughput will vary. Network conditions and environmental factors, including volume of traffic and network overhead, may lower actual data throughput rate. Interference from devices that emit electrical noise, such as vacuum cleaners and hair dryers, may adversely affect the performance of this product. This product may interfere with devices such as lighting systems that have a dimmer switch or a touch-sensitive on/off feature, short wave radios, or other Powerline devices that do not follow the HomePlug AV standard.

Updated 2012/11/19



