

## 10 Gigabit Ethernet SFP+ PCI Express Server Adapter

The EN-9320SFP+ is a 10 Gigabit Ethernet SFP+ PCI Express Server Adapter designed for the high-speed PCI Express bus architecture. This meets the high-performance requirements such as large file transfers and HD video editing, which utilizes high-performance shared storage system to have improved server efficiency and network performance. Combining the EN-9320SFP+ with SFP+ modules (Edimax MG-10G Series), your system is offered greater flexibility in optional fiber distances, and superior performance in fast and reliable 10Gbps network access that eliminates existing bottlenecks in current 32 and 64-bit PCI bus architectures. The EN-9320SFP+ is an ideal addition to your server or workstation to complement the requirements of low latency, high bandwidth, and low CPU overhead.

## **10GbE Superior Network Speed**

By sporting a 10 Gigabit SFP+ interface, the EN-9320SFP+ is capable of providing 10 times better performance than existing Gigabit transmissions. Using SFP+ modules, the EN-9320SFP+ is an easily capable server NIC of your networks that supports up to 2000Mbps full-duplex bandwidth capacity. Now with the PCI Express rev. 2.0 specification x4 Interface, the EN-9320SFP+ provides an optimal upgrade solution to the main board by providing fiber optic connection to PCI Express interface.

## **Advanced Features and Security**

The EN-9230SFP+ is designed with high-speed PCI Express bus architecture that includes advanced features and security. It sports 802.1Q Virtual LAN (VLAN) tagging for Ethernet frames, allowing the network administrator to assign multiple subnets to each server. Moreover, it can separate devices within each VLAN from the rest of the network for better traffic management. This provides flexible operation while having a secure and simple network environment. In addition, the EN-9320SFP+ supports other advanced features such as 16K Jumbo Frame to maximize the throughput and IEEE 802.3x Flow Control, which avoids risks of packet loss for best performance in data transfer.

### **Enhanced CPU & Network Efficiency**

The card features TCP, UDP, and IP checksum offloading, which offloads checksum processing to the network card. EN-9320SFP+ can free up resources on the CPU to the rest of system to handle other tasks without compromising network speed (of up to 10Gbps).

## **Greater Flexibility with Distance Extension**

Compatible with the 10GbE SFP+ modules, the EN-9320SFP+ connects your server or workstation directly to a fiber network. Depending on the chosen SFP+ module (Edimax MG-10G Series), which offers further flexibility, your network distance can have an extension range from 300 meters (MG-10GAMA via multi-mode fiber) to up to 10 kilometers (MG-10GAS1 via single-mode fiber).



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## **KEY FEATURES**

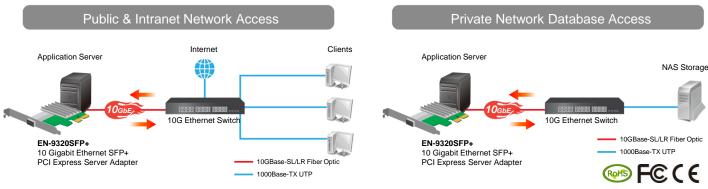
- •PCI Express rev. 2.0 Specification x4 interface
- •Converts a PCIe slot into an SFP+ fiber slot
- Compatible with standard SFP+ modules
- •16K jumbo frames
- •IP, TCP, UDP checksum offloading
- •Reduced CPU utilization and improved through
- •Supports IEEE 802.1Q VLAN ID tagging and IEEE 802.1q QoS
- Low profile bracket included

## **SPECIFICATIONS**

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Hardware	
Attachment Interface	PCI Express Rev. 2.0 Specification x4 Interface
Media Interface	SFP+ Connector
Optical Module Options	LR, SR
Jumbo Frame	16K Bytes
LED Indicators	LNK / ACT Per Port
Typical Power Consumption	4 Watts
Software	
OS Compatibility	Windows Server 2012 R2, Server 2012, Server 2008R2, Server 2016 Windows 10, Windows 8.1, Windows 7 (32/64-bit) Linux 4.x, 3.x, Linux 2.6.x (32/64-bit) Mac OS X 10.10.X (Yosemite) Mac OS X 10.11.x (EL Captain) MAC OS Sierra (10.12.x) VMware ESXi 6.0, 5.5, 5.1 Microsoft Hyper-V Linux KVM Oracle VirtualBox
Environment	
Temperature	Operating: 0 - 50 $^{\circ}$ C Storage: -40 - 85 $^{\circ}$ C
Humidity (Non-Condensing)	Operating: 5 - 95% Storage: 5 - 95%
Physical Characteristics	
Dimensions (W x D)	82 x 62mm
Weight	65g
Standards Compliance	
Standards and Protocols	IEEE 802.3ae: 10Gbps Ethernet IEEE 802.3x: Flow Control and Back Pressure IEEE 802.2ad: Link Aggregation IEEE 802.1Q VLAN support RFC2819 RMON MIB statistics
Certifications	FCC, CE

<sup>\*</sup>Note: Fiber data transfer speeds and distances are dependent on the SFP module used (sold separately).

#### APPLICATION DIAGRAM



Maximum performance and actual data rates will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice. Copyright © 2017 Edimax Technology Co. Ltd. All rights reserved.



<sup>\*</sup>System and cable requirements: Available PCI Express x4 slot. Not compatible with 10/100/1000Mbps SFP transceivers, 10 Gigabit SFP+ transceiver required.