NETGEAR®
BUSINESS

Data Sheet | **GS752TXS**

52-port Gigabit Stackable Smart Switch

Industry's First Smart Switch with 10-Gigabit Connectivity

An ideal companion to the rapidly emerging class of 10-gigabit servers, the NETGEAR® 52-port Gigabit Stackable Smart Switch is the industry's first smart switch with 10-gigabit connectivity – delivering maximum throughput in SMB networks for demanding tasks such as data replication and backup, virtualization, video on demand and high-volume transaction processing. At less than half the cost of a Smart switch, the 52-Port Gigabit Smart Switch provides 48 gigabit ports for connecting devices to the network, along with four 10GE SFP+ ports for stacking or uplink to servers. As many as six switches can be stacked for a total of 288 network ports, with full redundancy for unsurpassed reliability. The GS752TXS offers a rich enterprise-class feature set, including advanced traffic management and security, yet can be easily configured and monitored through a web-based graphical user interface.

Highlights

Enterprise-Class Features

With a rich set of Layer 2 management features, the GS752TXS is efficient, secure and ready for the future. Static routing allows for segmentation of the network, with internal routing through the switch – reserving the router for external traffic routing only, making the entire network more efficient. Dynamic VLAN assignment increases security by imposing consistent policy and user credentials across the network, regardless of where users connect. Support for MLD Snooping greatly increase network efficiency by forwarding multicast traffic to designated hosts only, rather than flooding multicast packets across all ports. The GS752TXS also comes with full IPv6 support, comprehensive security and advanced multicast management.

Scalability and Reliability

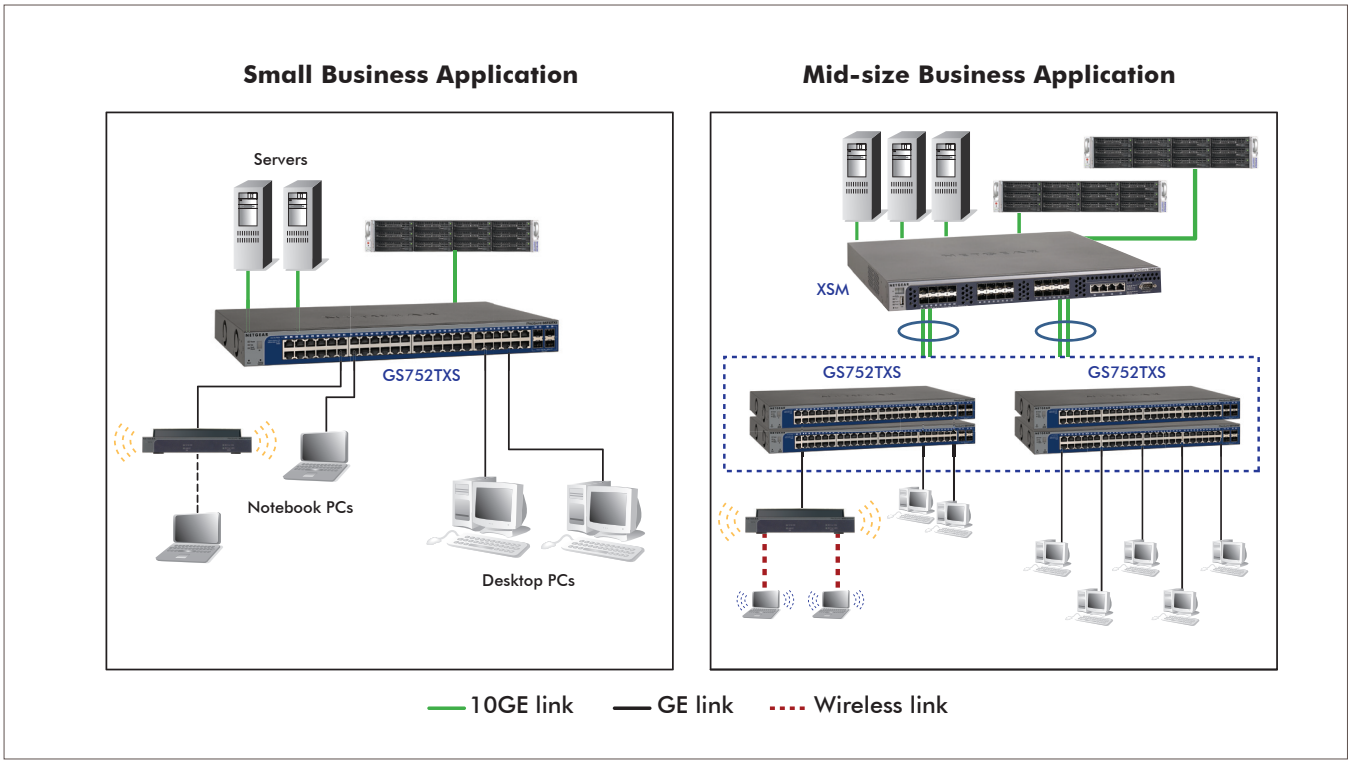
The GS752TXS is a scalable solution that grows with a business. Starting with a single switch, the stack can grow to six switches with a total of 288 network ports. Two out of the four 10-gigabit SFP+ ports on each switch can be used to create the stack, a single logical unit with up to 40 Gbps of stacking backplane that can be configured and managed as one switch – speeding up deployment while simplifying administration and maintenance. The stacked switches can be spread across multiple physical locations, by taking advantage of SFP+ fiberoptic connectivity, making the GS752TXS an ideal solution for remote and branch offices. All four 10GE ports can be used for network uplinks to servers and storage devices, or split with two ports for local or distant stacking and two ports for uplinks and link aggregation. Auto failover creates a safety net so that if one switch in the stack fails, all the other switches will be intact.

Flexible Management Options

As a "smart" switch, IT administrators can decide how to manage the GS752TXS. Individual switches can be managed through a simple browser-based graphical user interface. The GS752TXS can also be managed through SNMP software for compatibility with existing SNMPbased consoles. For larger networks, NETGEAR's Smart Control Center, is a free Windows based application for discovering, configuring and upgrading multiple smart switches across the network. For networks including network devices from NETGEAR such as switches, wireless access points and NAS, the NETGEAR Network Management System (NMS-200) can help manage them all from a single console for extensive visibility, granular control and seamless automation across the entire network.

Like all NETGEAR Smart Switches, the GS752TXS is backed by the NETGEAR Limited Lifetime Warranty*, and 1-Year ProSupport 24x7 Advanced Technical Support**.

Target Application



Features and Benefits

Hardware Features	
10-gigabit connectivity	Fully exploits the power of 10GE servers Supports high-bandwidth applications such as data backup and replication, virtualization, video on demand and high-volume transaction processing
Stack up to six switches	Scalable switching that grows with the enterprise Auto failover creates a safety net so that if one switch in the stack fails, all other switches will be intact
Four 10GE SFP+ stacking/uplink ports	Up to 40 Gbps of stacking backplane Fiber-optic connections allow stacked switches to be placed in multiple physical locations, supporting remote or branch offices
Software Features	
Dynamic VLAN assignment	Increases security by imposing consistent policy and user credentials across the network, regardless of where users connect
MLD snooping	Increases network efficiency by forwarding multicast traffic to designated hosts only, rather than flooding multicast packets across all ports
Full support for IPv6	Protects IT investment by future-proofing the network for the next generation of applications and extensions
DHCP snooping	Prevent access layer attacks such as DHCP server attacks, ARP man-in-the-middle attacks and IP/MAC spoofing attacks by using IP-to-MAC binding information
Protected ports	Increases security by isolating specific ports from communicating with other ports on the same switch Prevents an attacker from scanning a system to gain valuable services and information
NETGEAR Network Management System (NMS200)	Extensive visibility, granular control and seamless automation across the network for a range of NETGEAR products including switches, wireless infrastructure and network-attached storage

Network Protocol & Standards Compatibility	GS752TXS
• IEEE 802.3 10BASE-T • IEEE 802.3u 100BASE-TX • IEEE 802.3ab 1000BASE-T • IEEE 802.3z 1000BASE-X • IEEE 802.3x full-duplex flow control • IEEE802.3aq (10GEBASE-LRM) • IEEE802.3ae (10GEbase Ethernet) • IEEE802.3az (EEE)	
Interfaces	
	48 10/100/1000 Mbps switching ports
	4-10GEbps SFP+ slots (port 49~52) to support 10GEbps optical module and 1G optical module
	Port 51 and port 52 can be used as the stacking ports or as uplink ports.
Auto-sensing and auto-negotiating capabilities for all copper ports	Yes
Auto Uplink™ on all ports to make the right connection	Yes
Administrative Switch Management	
IEEE 8021.Q VLAN	256 groups, Static
IEEE 802.1p Class of Service (CoS)	Yes
Hardware Queues	8
Port-based QoS	Yes
IEEE 802.3ad Static or Dynamic Link Aggregation (LACP)	Yes
IEEE 802.1D Spanning Tree Protocol	Yes
IEEE 802.1w Rapid Spanning Tree Protocol	Yes
IEEE 802.1s Multiple Spanning Tree Protocol	Yes
SNMP v1, v2c, v3	Yes
RFC 1213 MIB II	Yes
RFC 1643 Ethernet Interface MIB	Yes
RFC 1493 Bridge MIB	Yes
RFC 2131 DHCP client	Yes
IEEE 802.1x (RADIUS)	Yes
IEEE 802.1x Dynamic VLAN Assignment	Yes
HTTPS/SSL: Secure HTTP GUI	Yes
RADIUS accounting	Yes
Layer 3 (DSCP) Quality of Service (QoS)	Yes
TACACS+	Yes
Port-based security by locked MAC addresses	Yes
TCP/UDP-based priority mapping	Yes
IGMP snooping	v1, v2, v3
MLD snooping	Yes
ACLs (MAC, IPv4, IPv6 and TCP/UDP based)	Yes

Storm control for broadcast, multicast and unknown unicast packets	Yes
Port-based ingress/egress rate limiting	Yes
SNTP	Yes
DNS	Yes
DoS and Auto DoS prevention	Yes
IPv6 management, multicast and QoS	Yes
Static Routing	Yes
DHCP snooping	Yes
Green Features	Lower power consumption during link-down or idle mode or with shorter cable length.
Protocol and MAC-based VLAN	Yes
RMON group 1, 2, 3, 9	Yes
Private Enterprise MIB	Yes
Port mirroring	many-to-one
IEEE 802.3ab LLDP	Yes
LLDP-MED	Yes
Protected ports	Yes
Cable test	Yes
Smart Control Center discovery	Yes
Web-based configuration	Yes
Configuration backup/restore	Yes
Password access control	Yes
Firmware upgradeable	Yes
Performance Specification	
Forwarding modes	Store-and-forward
Bandwidth (per unit)	176 Gbps
Stacking	Up to 6 switches for 300 ports per stack
Stacking bandwidth	20 Gbps
Network latency	Less than 20 microseconds for 64-byte frames in store-and-forward mode for 1000 Mbps to 1000 Mbps transmission
Buffer memory	2 MB
DDR SDRAM (32Mbx16)	128Mbytes system
Flash memory	32Mbytes
Address database size	16K media access control (MAC) addresses per system
Addressing	48-bit MAC address
Number of VLANs	256 Maximum VLAN id is 4093
Number of 802.1p traffic classes	7
Number of LAGs	8

Number of static routes	32
Number of routed VLANs	15
Number of ARP Cache entries size	1024
Queues used for DiffServ	7
Number of ACLs (IPv4/IPv6)	100
Number of DHCP snooping binding	8K
Number of DHCP static entries	1024
Mean time between failures (MTBF)	256,119 hours (~29.3 years) at 25 °C 90,993 hours (~10.3 years) at 55 °C
LEDs	
Unit	Power, master, stack ID, FAN
Per port	Link, speed, activity
Power Supply	
Max Power consumption	77W
Universal input	100-240V AC/50-60 Hz
Physical Specifications	
Dimensions	43 x 440 x 257 mm (1.69 x 17.32 x 10.13 in)
Weight	4.50 kg (9.92 lb)
Environmental Specifications	
Operating	
Operating Temperature	32° to 104° F (0° to 50° C)
Humidity	95% maximum relative humidity, non-condensing
Altitude	10,000 ft (3,000 m) maximum
Storage	
Storage Temperature	-4° to 158° F (-20° to 70° C)
Humidity (relative)	95% maximum relative humidity, non-condensing
Altitude	10,000 ft (3,000 m) maximum
Electromagnetic Compliance	
Certifications	CE mark, commercial FCC Part 15 Class A VCCI Class A EN 55022 (CISPR 22) EN 55024 (CISPR 24) C-Tick
Safety	
Certifications	CE mark, commercial CUL 60950 (Listed)/EN 60950 (Low Voltage Directive)
System Requirements	
	Category 5 UTP Network cables or better Network card for each PC Network software (e.g., Windows7)

Warranty and Support	
Warranty	Limited Lifetime Warranty*
ProSupport 24x7 Advanced Technical Support	1 year (included)**
ProSUPPORT Service Packs Available	XPressHW, Category 2: PRR0332 (3-year next-business day hardware replacement contract) OnCall 24x7, Category 2: PMB0332 (3-year Advanced Technical Support contract, including Remote Diagnostics performed by our technical experts for prompt resolution of technical issues, and next-business day hardware replacement)
Package Contents	
	52-Port Gigabit Stackable Smart Switch with 10GE uplinks Rubber footpads Power cord Rackmount kit Resource CD installation guide Warranty/support information card

Ordering Information	
GS752TXS-100NAS	North America
GS752TXS -100EUS	Europe
GS752TXS -100AJS	Asia/Japan
Supported Modules	
AGC761	10GEBASE-SR SFP+ GBIC
AXM762	10GEBASE-LR SFP+ GBIC
AXM763	10GEBASE-LRM SFP+ GBIC
AXC761	1m Direct Attach SFP+ Cable
AGM731F	1000BASE-SX SFP GBIC: Module with LC connectors for 50um or 62.5um multi-mode fiber cable
AGM732F	1000BASE-LX SFP GBIC: Module with LC connectors for 9um single-mode fiber cable
AGM733	

*This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and covers unmodified hardware, fans and internal power supplies – not software or external power supplies, and requires product registration at https://www.netgear.com/business/registration within 90 days of purchase; see https://www.netgear.com/about/warranty for details. Intended for indoor use only.

** 1-year 24x7 Advanced Technical Support includes Remote Diagnostics performed by our technical experts for prompt resolution of technical issues.

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D-GS752TXS-29Jan21