

FS526T, FS728TLP, FS728TP and FS750T2



The NETGEAR® Fast Ethernet Smart Managed Switches offer a comprehensive L2 feature set and enhanced performance and usability. They are purposely designed for small and medium-sized networks where reliability and performance are key, and operational cost savings and ease of management are must-haves.

There are four products in this series: 26- and 50- port Fast Ethernet Smart Managed Switch, 28-port Fast Ethernet with 12 PoE ports and 28-port with 24 PoE ports. All switches come with dedicated Gigabit SFP ports for either Gigabit and/or fiber uplinks. These ProSAFE Fast Ethernet Smart Managed Switches from NETGEAR are the optimized solutions providing the best value at an affordable SMB price point.

### Highlights

#### Preserve the Efficiency of current Network and support seamless integration with the high-speed Core

- Fast Ethernet holds the best value for the majority of small network traffic need
- All models come with Gigabit copper and Fiber uplink ports, supporting easy connection to Gigabit backbone or servers
- Comprehensive L2 network features ensure consistency in network setup and policy across the network, regardless of network speed.
- IGMP provides advanced multicast filtering and efficient use of network bandwidth

#### Build Eco-friendly network with NETGEAR

- Fanless Design on non-PoE models for quiet operation and non-intruding for any environment
- Variable Speed Fan on PoE models enables the fan to turn on at a certain temperature in order to minimize the noise level
- PoE Timer for scheduling on/off time of your PoE powered devices for better control and optimized use of your devices.
- Energy Efficient Ethernet (IEEE802.3az) for energy saving and OPEX reduction (except FS728TP, FS750T2)

#### Small IT, not Big IT

- Easy to manage via web browser-based management GUI or Smart Control Center (Windows PC required) for multi-switch deployment
- Standard-based technology, ensuring interoperability with any standard-based devices in the existing network
- Worry-free with NETGEAR ProSAFE Lifetime Hardware Warranty
- Assist with customer deployment with 1-year Free 24x7 Advanced Technical Support\*

#### Network Development Made Easy

- Auto Voice VLAN for easy development of VoIP (except FS750T2)
- Auto Video for simple deployment of IP Surveillance (except FS728TP, FS750T2)
- ACL Wizard for a guided tour to set up your network access control
- Smart Control Center, a powerful tool for multi-switch discovery, deployment, monitoring and firmware upgrade
- NMS300, the NETGEAR Network Management System, consolidates the deployment and management of these switches along with all NETGEAR business products.

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### Hardware at a Glance

Model Name	Form-Factor	FRONT			REAR	
		10/100 Base-T RJ45 Ports	Gigabit Copper or Gigabit Fiber SFP Ports	PoE 802.3af	Power Supply	PoE Budget
FS526T	Rackmount	24	2 Copper	N/A	Internal	N/A
FS728TLP	Rackmount	24	2 Copper and 2 combo copper/SFP	12 PoE 802.3af	Internal	100W
FS728TP	Rackmount	24	2 Copper and 2 combo copper/SFP	24 PoE 802.3af	Internal	192W
FS750T2	Rackmount	48	2 Combo copper/SFP	N/A	Internal	N/A



**FS526T:** 24-port 10/100Base-T Fast Ethernet Smart Managed Switch

- 2 dedicated Gigabit copper ports



**FS728TLP:** 24-port 10/100base-T Fast Ethernet PoE Smart Managed Switch

- 2 dedicated Gigabit copper ports and 2 combo copper/SFP ports
- 12 PoE Ports
- 100W total PoE budget



**FS728TP:** 24-port 10/100base-T Fast Ethernet high powered PoE Smart Managed Switch

- 2 dedicated Gigabit copper ports and 2 combo copper/SFP ports
- 24 PoE Ports
- 192W total PoE budget



**FS750T2:** 48-port 10/100Base-T Fast Ethernet Smart Managed Switch

- 2 Gigabit combo copper/SFP ports

### Software at a Glance

Management	IPv4 Multicast Filtering	Auto Voice and Auto Video	EEE (802.3az) Auto-EEE	VLANs	Convergence
Web GUI, RMON, SNMP	IGMP Snooping and querier	Yes, depending on model	Yes (except FS728TP, FS750T2)	Static, Voice, Video (depending on model)	LLDP-MED, RADIUS, 802.1x PoE timer (except FS750T2)

### Performance at a Glance

Model Name	Packet Buffer	MAC Address Table	# of VLAN	Multicast Group	Number of Priority Queues
FS526T	512KB	8K	128	128	8
FS728TLP	512KB	8K	128	128	8
FS728TP	1MB	4K	128	512	8
FS750T2	512KB	8K	64	N/A	4

### Features and Benefits

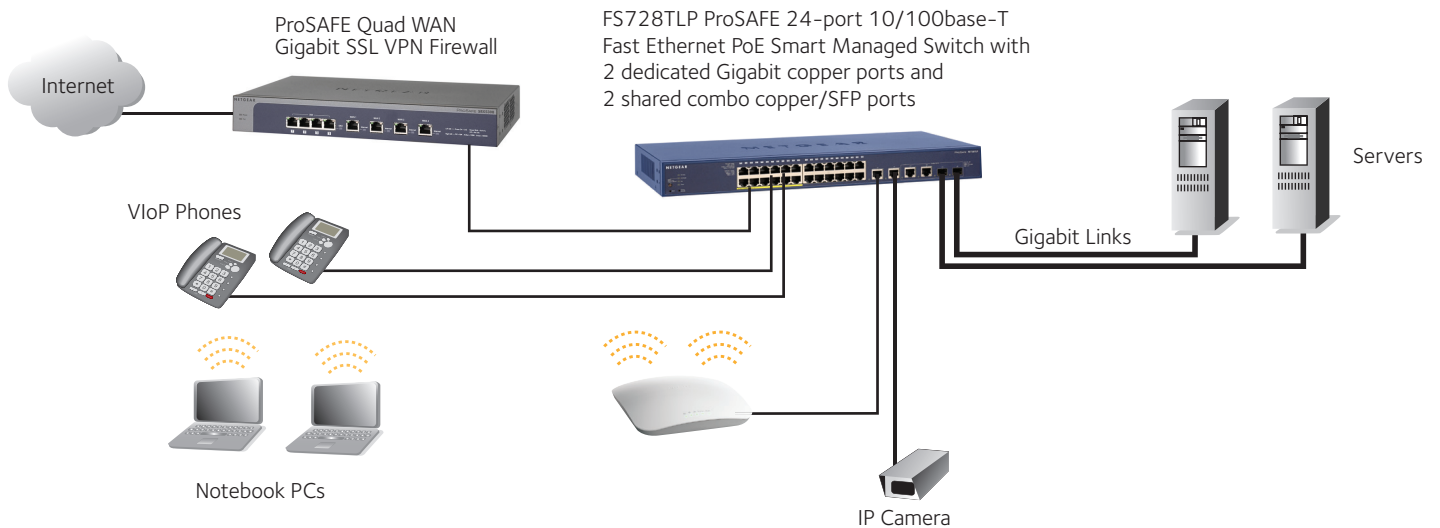
Features	Benefits
Dedicated SFP Fiber uplinks	<ul style="list-style-type: none"> <li>Dedicated SFP ports provides Gigabit copper and fiber uplinks without sacrificing any downlink port. Up to 4 SFP ports provide not only redundant uplinks, but can also build dual redundancy by a trunked uplink with link aggregation and failover, the dual-redundancy, a powerful design for the network virtualization</li> </ul>
Comprehensive QoS features: <ul style="list-style-type: none"> <li>Port-based or 802.1p-based prioritization</li> <li>Layer 3-based (DSCP) prioritization</li> <li>Port-based ingress and egress rate limiting</li> </ul>	<ul style="list-style-type: none"> <li>Advanced controls for optimized network performance and better delivery of mission-critical traffics such as voice and video</li> </ul>
Robust security feature (except FS750T2): <ul style="list-style-type: none"> <li>802.1x authentication (MD5)</li> <li>DHCP Filtering (FS728TP only)</li> <li>Port-based security by locked MAC</li> <li>ACL filtering to permit or deny traffic based on MAC and IP addresses</li> </ul>	<ul style="list-style-type: none"> <li>Build a secured, converged network with all types of traffic by preventing external attacks and blocking malware while allowing secure access for authorized users</li> </ul>
NETGEAR Network Management System (NMS300)	<ul style="list-style-type: none"> <li>Extensive visibility, granular control and seamless automation across the network for a range of NETGEAR products</li> </ul>
IGMP Snooping	<ul style="list-style-type: none"> <li>Facilitate fast receiver joins and leaves for multicast streams. Save cost and improve network efficiency by ensuring multicast traffic only reaches designated receivers without the need of an extra Multicast router.</li> </ul>
Auto Voice and Auto Video (except FS750T2) (FS728TP Auto Voice only)	<ul style="list-style-type: none"> <li>Automatic Voice over IP prioritization with Auto-VoIP simplifies most complex multi-vendor IP telephones deployments either based on protocols (SIP, H323 and SCCP) or on OUI bytes (default database and user-based OUIs) in the phone source MAC address; providing the best class of service to VoIP streams (both data and signaling) over other ordinary traffic by classifying traffic, and enabling correct egress queue configuration. When deployed IP phones are LLDP-MED compliant, the Voice VLAN will use LLDP-MED to pass on the VLAN ID, 802.1P priority and DSCP values to the IP phones, accelerating convergent deployments.</li> </ul>
DHCP Snooping	<ul style="list-style-type: none"> <li>Ensure IP address allocation integrity by allowing only clients with specific IP/MAC addresses to have access to the network.</li> </ul>
Dual firmware Images and configuration files	<ul style="list-style-type: none"> <li>Dual firmware image and dual configuration file for transparent firmware updates/configuration changes with minimum service interruption</li> </ul>
PoE Timer	<ul style="list-style-type: none"> <li>Allows IT administrators to increase network security, better utilize network resources and conserve energy by scheduling or remotely controlling on/off of PoE ports.</li> </ul>
Protected Ports	<ul style="list-style-type: none"> <li>Ensure no exchange of unicast, broadcast, or multicast traffic between the protected ports on the switch, therefore, improve the security of your converged network where your sensitive phone conversation can stay private and your surveillance video clips can be forwarded to their designated storage device without leakage or alteration.</li> </ul>

### Target Application

#### Converged Network Application

The NETGEAR Fast Ethernet Smart Managed Switch provides the best value for the right-sized networks

- Fast Ethernet for cost-efficiency
- Gigabit uplink for uncompromised bandwidth into network backbone or servers
- Cost-effectively bring intelligence to the edge of the network with traffic management features from the Smart Managed Switches
- Improved usability for easier and smoother deployment of voice and video on the same converged platform
- Lifetime warranty and 1-year free advanced tech support for peace-of-mind



### Technical Specifications

PRODUCT SPECIFICATIONS				
Model	FS526T	FS728TLP	FS728TP	FS750T2
10/100Mbps ports	24	24	24	48
Gigabit ports	2	4	4	2
SFP ports	-	2 (combo)	2 (combo)	2 (combo)
# of PoE ports	-	12	24	-
Total PoE Power budget (Watts)	-	100	192	-
Max MAC entries	8K	8K	4K	8K
Buffer size	512KB	512KB	1MB	512KB
EEE	Yes	Yes	-	-
FAN	N/A	1	1	N/A
Acoustic Noise Level @25C (dBA)	0	30.7	38.1	0
MTBF	334,168 hrs	755,725 hrs	237,497 hrs	59,800 hrs
L2 SERVICES - VLANs				
VLAN (# Supported)	128	128	128	64
IEEE 802.1Q VLAN Tagging	Yes			
Port- based VLAN	No			Yes
IP based VLANs	Yes			No
MAC based VLANs	Yes			No
Voice VLAN	Based on phones OUI bytes (internal database, or user-maintained) or protocols (SIP, H323 and SCCP)			No
NETWORK SECURITY				
IEEE 802.1x Radius Port Access Authentication	MD5 (except FS750T2)			No
Guest VLAN	Yes			No
RADIUS Accounting	Yes			No
MAC lockdown by the number of MACs	Yes			No
Dynamic learned entries per port	600	600	128	-
Static entries per port	20	20	20	-
Network Storm Protection, DoS	Yes			No
Broadcast, Unicast, Multicast DoS Protection	Yes			No
DoS attacks	Yes			No
IP-based ACLs	Yes			No
MAC (Trusted MAC)	Yes			No
L4 ACL	Yes			No
Protected Port	Yes			No

### Technical Specifications

Model	FS526T	FS728TLP	FS728TP	FS750T2
<b>L2 SERVICES - AVAILABILITY</b>				
IEEE 802.3ad - LAGs	Yes			No
LACP	Yes ( (8 LAGS with max. of 8 members in each LAG))			6 Static LAGs with max of 8 members in each LAG
Broadcast Storm Control	Yes			No
IEEE 802.3x (Full Duplex and Flow Control)	Yes			
IEEE 802.1D Spanning Tree Protocol	Yes			No
IEEE 802.1w Rapid Spanning Tree	Yes			No
IEEE 802.1s Multiple Spanning Tree	No	No	Yes	No
BPDU Guard	Yes			No
DoS Prevention	Yes			No
PoE Timer		Yes	Yes	
<b>L2 SERVICES - MULTICAST FILTERING</b>				
IGMP Snooping (v1, v2c and v3)	Yes			No
Max. Multicast Group	128	128	512	
IGMP Snooping queries	Yes			No
Block unknown Multicast	Yes			No
<b>L3 SERVICES - DHCP</b>				
DHCP Filter	No	No	Yes	No
DHCP Client	Yes			Yes
<b>NETWORK MONITORING AND DISCOVERY SERVICES</b>				
802.1ab LLDP and LLDP-MED	Yes			No
SNMP	v1, v2c, v3			v1 and v2c
RMON 1,2,3,9	Yes			No
ifTable	Yes			
<b>QUALITY OF SERVICE (QoS)</b>				
Number of Priority Queues	8	8	8	4
TCP/UDP-baesd QoS	No	No	Yes	No
Rate limiting	Yes	Yes	Egress only	No
DiffServ QoS	No	No	Yes	No
IEEE 802.1p COS	Yes			
Dst MAC and IP	Yes			No
IPv4 DSCP	Yes			No
IPv4 TOS	Yes	Yes	No	No

### Technical Specifications

Model	FS526T	FS728TLP	FS728TP	FS750T2
Strick, or WRR (Weighted Round Robin)	Both			WRR
Auto-VoIP	Yes, based on protocols (SIP, H323 and SCCP) or on OUI bytes (default database and user-based OUIs) in the phone source MAC address			No
Auto Video	Yes	Yes	No	No
Port Mirroring (ingress and egress)	Yes			
<b>IEEE NETWORK PROTOCOLS</b>				
<ul style="list-style-type: none"> <li>• IEEE 802.3 Ethernet</li> <li>• IEEE 802.3i 10BASE-T</li> <li>• IEEE 802.3u 100BASE-T</li> <li>• IEEE 802.3ab 1000BASE-T</li> <li>• IEEE 802.1Q VLAN Tagging</li> <li>• IEEE 802.3x Full-duplex Flow Control</li> <li>• IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX</li> <li>• IEEE 802.3ad Trunking (LACP)</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED)</li> <li>• IEEE 802.1p Class of Service</li> <li>• IEEE 802.3 af (PoE)</li> <li>• IEEE 802.1D Spanning Tree (STP)</li> <li>• IEEE 802.1s Multiple Spanning Tree (MSTP) (FS728TP Only)</li> <li>• IEEE 802.1w Rapid Spanning Tree (RSTP)</li> <li>• IEEE 802.1x (MD5) Radius network access control (except FS750T2)</li> </ul>			
<b>MANAGEMENT</b>				
Password management	Yes			
Configurable Management VLAN	Yes			No
Admin access control via Radius	Yes			No
Admin access control via TACACS+	No	Yes		No
Web browser-based graphical user interface (GUI)	Yes			
Smart Control Center (SCC) for multi-switch management	Yes			SmartWizard®
Dual Software (firmware) image	Yes			No
Dual Configuration file	No			
Cable Test utility	Yes		No	
File transfers (uploads, downloads)	TFTP / HTTP			TFTP only
HTTP Download (firmware)	Yes			No
<b>LEDs</b>				
Per port	Speed, Link, Activity			
Per device	Power, Fan and PoE Power Status (PoE model only)			
<b>PHYSICAL SPECIFICATIONS</b>				
Weight (kg)	1.35	2.92	3.57	3.2
Dimensions (WxDxH) mm	326x168x43	440x204x43	440x257x43	440x205x43
<b>POWER CONSUMPTION (WHEN ALL PORTS USED, LINE-RATE TRAFFIC AND MAX POE IF APPLICABLE)</b>				
Worst case, all ports used, line-rate traffic, max PoE	12w	124w	256w	19.65w

### Technical Specifications

Model	FS526T	FS728TLP	FS728TP	FS750T2
<b>ENVIRONMENTAL SPECIFICATIONS</b>				
Operating				
Operating Temperature	32° to 122°F (0° to 50°C)			32° to 104°F (0° to 40°C)
Humidity	90% 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	95% maximum relative humidity, non-condensing			
Altitude	10,000 ft (3,000 m) maximum			
<b>ELECTROMAGNETIC EMISSIONS AND IMMUNITY</b>				
Certifications	CE mark, commercial			
	FCC Part 15 Class A, VCCI Class A			
	Class A EN 55022 (CISPR 22) Class A			
	Class A C-Tick			
	EN 61000			
	EN 55024			
	CCC (except FS526T)			
<b>SAFETY</b>				
Certifications	CE mark, commercial			
	CSA certified (CSA 22.2 #950)			
	UL listed (UL 1950)/cUL IEC 950/EN 60950			
<b>WARRANTY AND SUPPORT</b>				
ProSAFE Lifetime Warranty*	Included, lifetime			
ProSUPPORT Lifetime 24x7 Advanced Technical Support**	Included, 1 year			



### Ordering Information

PACKAGE CONTENT	
All models	ProSAFE® Fast Ethernet Smart Managed Switch
	Power cord
	Rack-mounting kit
	Resource CD with links to online documentation, installation guides, browser-based management user manual, Smart Control Center (SCC) software (except FS750T2) and user guide.
ORDERING INFORMATION	
FS526T-200NAS	for North America and Latin America
FS526T-200EUS	for Europe
FS526T-200AJS	for Asia
FS728TLP-100NAS	for North America and Latin America
FS728TLP-100EUS	for Europe
FS728TLP-100AJS	for Asia
FS728TLP-100PRS	for China
FS728TP-100NAS	for North America and Latin America
FS728TP-100EUS	for Europe
FS728TP-200AJS	for Asia
FS728TP-200PRS	for China
FS750T2NA	for North America and Latin America
FS750T2EU	for Europe
FS750T2AU	for Asia
OPTIONAL MODULES AND ACCESSORIES (EXCEPT FS526T)	
AFM735	100Base-FX SFP GBIC (Multimode)
AGM731F	1000Base-SX SFP GBIC (Multimode)
AGM732F	1000Base-LX SFP GBIC (Single mode)
PROSUPPORT SERVICE PACKAGES	
PMB0311 (1 yr.) PBM0331 (3 yrs.) PMB0351 (5 yrs.)	The NETGEAR OnCall 24x7 contract provides unlimited phone and email technical support for your networking and storage products. For ProSAFE products purchased prior to 06/2014, also includes next-business-day hardware replacement.

\* This product comes with a limited warranty that is valid only if purchased from a NETGEAR authorized reseller, and modifications to product may void the warranty; covers hardware, fans, and internal power supplies—not software or external power supplies; see <http://www.netgear.com/about/warranty/> for details. Lifetime technical support includes basic phone support for 90 days from purchase date and lifetime online chat support when purchased from a NETGEAR authorized reseller.

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

† NETGEAR #1 in Fixed Web(Smart)-Managed Worldwide Market Share according to IHS Infonetics Ethernet Switches Market Share and Forecast, 1Q15 Edition, June 2015.

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