

The NETGEAR® ProSafe® “Intelligent Edge” Gigabit L2+ Managed Switches consist of two switches delivering a secure and flexible access layer in campus environments, warehouses and commercial buildings for convergence.

Intelligent Edge

Combining superior resiliency and advanced security, GSM7224 and GSM7248 provide comprehensive Layer 2 and Lite Layer 3 switching, including 32 routing interfaces and 32 static routes.

Unified Communications – Voice over IP

The NETGEAR ProSafe “Intelligent Edge” simplifies converged data deployments with state-of-the-art capabilities. CoS Layer 2 prioritization and DiffServ Layer 3 & 4 policies allow for TCP/UDP granularity. LLDP-MED (Media Endpoint Discovery) automatically configures IP phones QoS and VLAN settings.

Unified Communications – Video Streams

IGMP filtering and querier ensure multicast streams are only delivered to interested receivers, preventing flooding even without a dedicated multicast router.

Outstanding Value

With its high-value price point, industry-standard command line interface (CLI) and single-pane-of-glass NMS200 management platform (mass-configuration support), NETGEAR ProSafe “Intelligent Edge” yields a high return on investment. Both switches are backed by the NETGEAR ProSafe Lifetime Hardware Warranty*, ProSupport Lifetime 24x7 Advanced Technical Support*, and 3-Year Next Business Day Onsite Hardware Replacement.**



1-888-NETGEAR (638-4327)
Email: info@NETGEAR.com



Lifetime
Tech Support

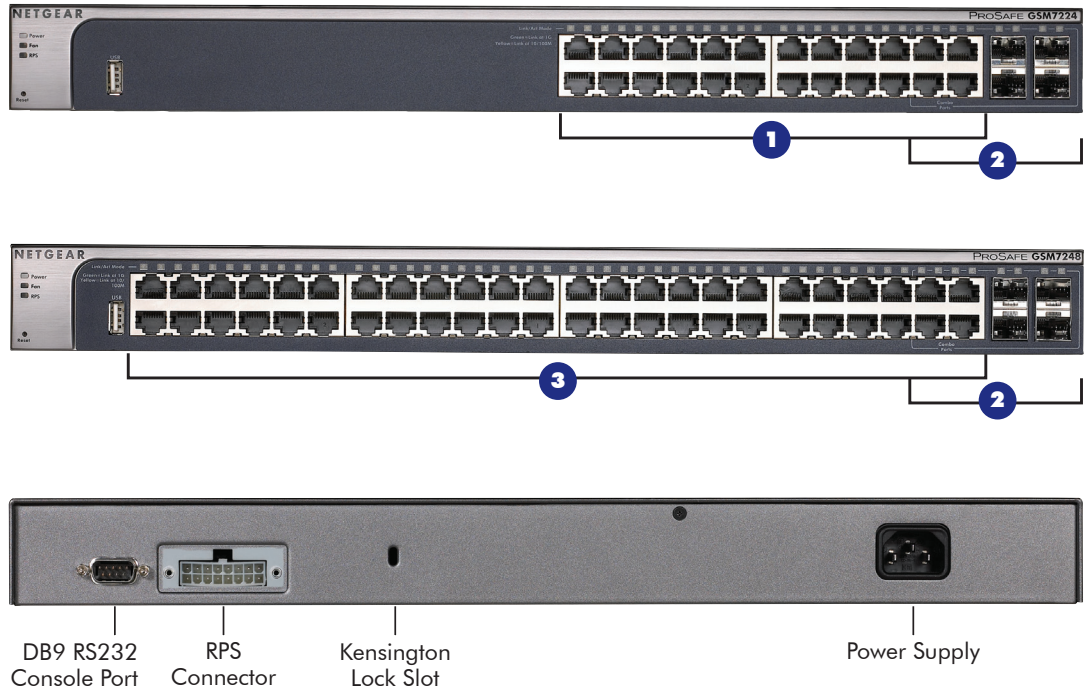
NBD* 3-year
on-site service

GSM7224 and GSM7248 at a Glance

24 Gigabit Ports (RJ45) **1**

4 Combo SFP Ports **2**

48 Gigabit Ports (RJ45) **3**



Modules, accessories

AGM731F/AGM732F Gigabit SFP GBIC



- Gigabit Ethernet fiber connectivity - LC duplex connector
- 5-year warranty
- AGM731F 1000SX "short reach multimode"
 - 50/125 μ m OM3 multimode: up to 550m
 - 62.5/125 μ m OM1 multimode: up to 275m
 - Ordering part number: **AGM731F**
- AGM732F 1000LX "long reach single or mode"
 - 9/125 μ m SMF single mode: up to 10 km
 - Ordering part number: **AGM732F**

AFM735 Fast Ethernet SFP GBIC



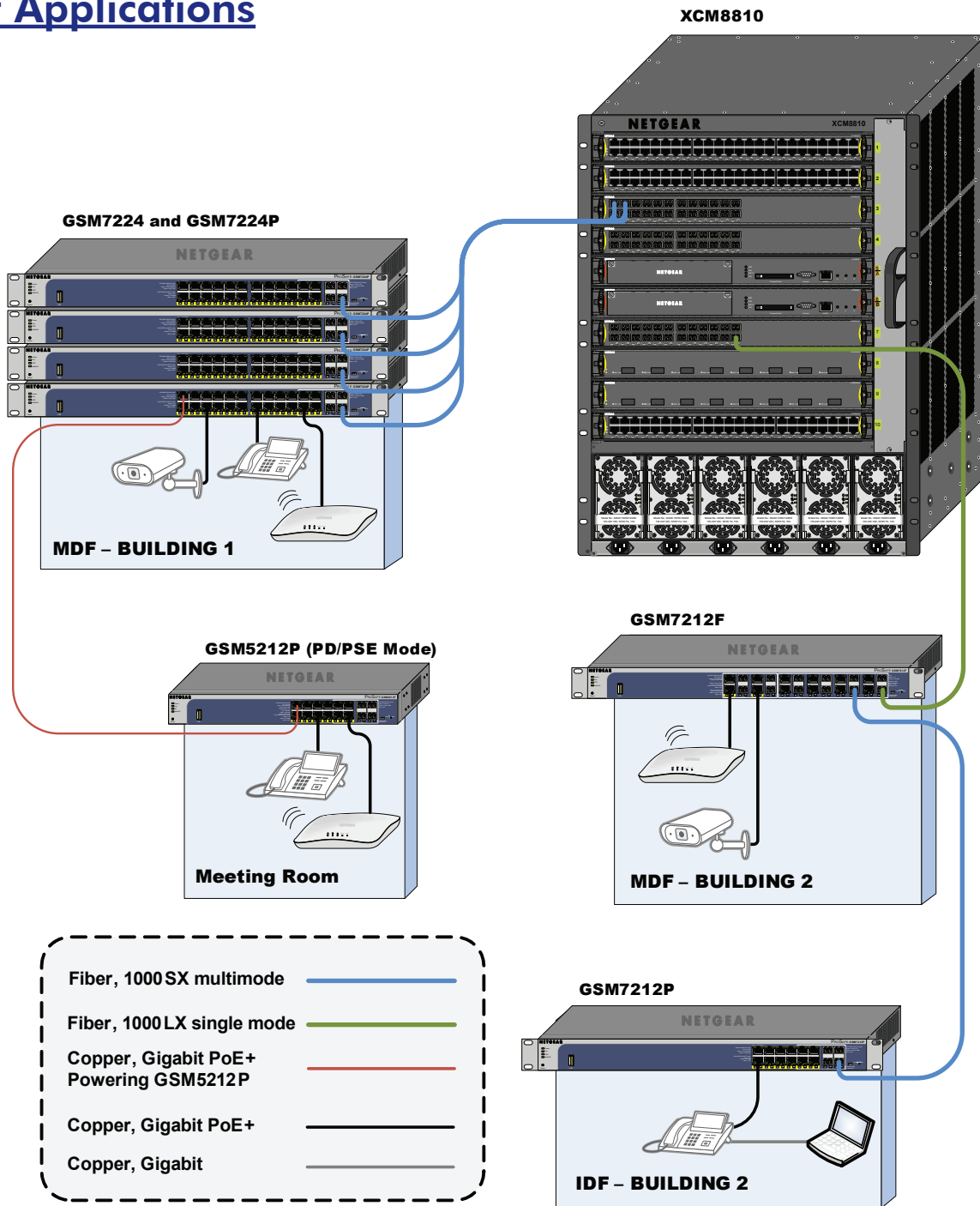
- Fast Ethernet fiber connectivity - LC duplex connector
- 5-year warranty
- AFM735 100BaseFX IEEE 802.3
 - 50/125 μ m or 62.5/125 μ m multimode: up to 2km
 - Ordering part number: **AFM735-10000S**

RPS5412 Optimal Power® External Redundant Power Supply



- Optimal Power® RPS unit certified by NETGEAR
- Includes the DC power cable for the Switch RPS connector (rear)
- Provides seamless redundant power to the Switch for uninterruptible powering
- 3-year warranty
- Ordering part number:
 - RPS5412-100NAS** (Americas)
 - RPS5412-100EUS** (Europe)
 - RPS5412-100AJS** (Asia)

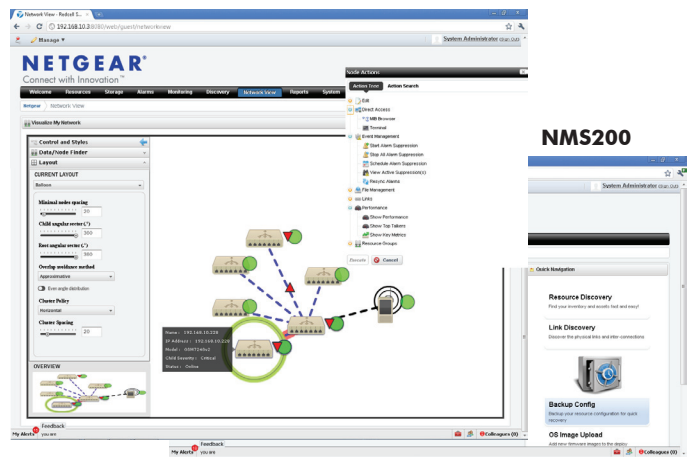
Target Applications



These Fully Managed Switches are Lite L3 with 32 IP interfaces for VLAN routing. Designed for the access layer, workstations and servers, they complement each other with the PoE+ versions of Intelligent Edge managed switches: GSM5212P, GSM7212F, GSM7212P and GSM7224P:

- Industry-standard CLI
- State-of-the-art L2/L3/L4 QoS and ACLs
- Multicast filtering for convergent applications

A single-pane-of-glass management platform – NMS200 – increases overall operational efficiency.





TECHNICAL SPECIFICATIONS	GSM7224	GSM7248
PHYSICAL INTERFACES		
Front <ul style="list-style-type: none"> • Auto-sensing RJ45 10/100/1000 • Shared SFP Fiber 100/1000 • USB (config/firmware/storage) Rear <ul style="list-style-type: none"> • Serial DB9 RS-232 for console • Redundant Power Supply • Kensington Lock Slot • Power Supply Total <ul style="list-style-type: none"> • Port Count 	24 ports 4 SFP ports 1 port 1 port 1 connector for RPS 1 slot 1 fixed PSU 24 ports, total	48 ports 4 SFP ports 1 port 1 port 1 connector for RPS 1 slot 1 fixed PSU 48 ports, total
PROCESSOR / MEMORY		
<ul style="list-style-type: none"> • Processor • System memory (RAM) • Packet buffer memory • Code storage (flash) 	MPC8321-333 @ 333MHz 128 MB 6 Mb 32 MB	MPC8321-333 @ 333MHz 128 MB 12 Mb 32 MB
PERFORMANCE SUMMARY		
<ul style="list-style-type: none"> • Non-blocking Switch fabric • Throughput • Forwarding mode • Latency (64-byte frames, 10 to 100 Mbps) • Latency (64-byte frames, 1 Gbps) • Addressing • Address database size • Number of VLANs (IEEE 802.1Q) • Max number of Multicast groups for IGMP filtering • Max number of trunks (Link Aggregation Groups) • Number of hardware queues for QoS • Number of static routes • Number of IP routing interfaces (port, VLAN) • Jumbo frame support • Max Acoustic noise (ANSI-S10.12) • Heat dissipation • Mean time between failures (MTBF) 	48 Gbps 35.7 Mpps Store-and-forward <9.0µs <3.1µs 48-bit MAC address 8,000 MAC addresses 1,024 out of 4,093 VLAN IDs 1,024 12 LAG, 8-port per LAG 8 queues 32 32 up to 9K packet size 38.6 dB 131 Btu/hr 239,032 hours (~27 years)	96 Gbps 71.4 Mpps Store-and-forward <9.0µs <3.1µs 48-bit MAC address 8,000 MAC addresses 1,024 out of 4,093 VLAN IDs 1,024 12 LAG, 8-port per LAG 8 queues 32 32 up to 9K packet size 48.8 dB 244 Btu/hr 162,303 hours (~19 years)
L3 SERVICES – ROUTING (IPV4)		
<ul style="list-style-type: none"> • IPv4 static routing (Subnets, VLANs) • IP routes, total • IP interfaces (ports, VLAN) • Static routes • IP Source Guard • Proxy ARP • IP Helper • IP Source Guard • Multinetting 	Yes 32 32 32 Yes Yes Yes Yes Yes	Yes 32 32 32 Yes Yes Yes Yes Yes
L3 SERVICES - DHCP (IPV4/IPV6)		
<ul style="list-style-type: none"> • DHCP server (1,024 clients) • Stateless DHCP server for IPv6 • DHCP L2 relay • DHCP snooping 	Yes Yes Yes Yes	Yes Yes Yes Yes
L3 SERVICES - MULTICAST (IPV4)		
<ul style="list-style-type: none"> • IGMP querier (v2) 	Yes	Yes
L2 SERVICES – SWITCHING (IPV4/IPV6)		
<ul style="list-style-type: none"> • MAC Address table • ARP cache size • Proxy ARP • Dynamic ARP Inspection 	8,000 MAC 480 Yes Yes	8,000 MAC 480 Yes Yes



TECHNICAL SPECIFICATIONS	GSM7224	GSM7248
L2 SERVICES – VLANS (IPV4/IPV6)		
<ul style="list-style-type: none"> IEEE 802.1Q static VLAN IEEE 802.1v Protocol VLAN Port-based VLAN MAC-based VLAN IP subnet-based VLAN Protocol-based VLAN Voice VLAN Guest/Unauthenticated VLAN (802.1x) Auto VLAN Assignment via RADIUS RADIUS-based Filter ID Assignment via 802.1x IEEE 802.1 Q-in-Q (Double-VLAN tagging) GARP with GVRP/GMRP Private Ports (VLAN edge groups) 	<p>1,024 out of 4,093 VLAN IDs</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes (128)</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>1,024 out of 4,093 VLAN IDs</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes (128)</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
L2 SERVICES - AVAILABILITY (IPV4/IPV6)		
<ul style="list-style-type: none"> IEEE 802.3ad Link Aggregation (Static or LACP) User selectable LAG hashing algorithm IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree IEEE 802.1s Multiple Spanning Tree STP Root guard BPDU Guard STP Loop Guard 	<p>12 LAG, 8-port per LAG</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>12 LAG, 8-port per LAG</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
L2 SERVICES – MULTICAST (IPV4/IPV6)		
<p>Filtering</p> <ul style="list-style-type: none"> IGMP v1, v2, v3 snooping support IGMP snooping per VLAN IGMP querier mode support MLD snooping support Static Multicast filtering 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>1,024 multicast groups</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>1,024 multicast groups</p>
L2/L3/L4 SERVICES – QoS (IPV4/IPV6)		
<ul style="list-style-type: none"> L2/L3/L4 QoS Policies IEEE 802.1p Class of Service (CoS) COS configuration possible for 802.3ad LAG Flow based COS queue assignment DiffServ QoS (RFC 2998) DiffServ service interface for 802.3ad LAG Weighted round robin (WRR) queue technology Strict priority queue technology Rate limit in 1 Kbps increments, Ingress Traffic shaping, Egress (1-100 percentage) Flow based mirroring Flow based redirection Color aware policing 	<p>MAC, IP, TCP/UDP ports</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>MAC, IP, TCP/UDP ports</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
L2/L3/L4 SERVICES – SECURITY (IPV4/IPV6)		
<ul style="list-style-type: none"> Access control lists (ACL) L2/L3/L4 MAC-based source/destination ACL IP subnet-based source/destination ACL Protocol-based source/destination ACL ACL over VLAN Dynamic ACLs Number of ACLs (any type) Number of ACL rules Multiple ACLs per port ACL assignment possible for 802.3ad LAG ACL policy hit logging Flow based COS queue assignment Flow based mirroring Flow based redirection 	<p>MAC, IP, TCP/UDP ports</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>100</p> <p>512</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>MAC, IP, TCP/UDP ports</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>100</p> <p>512</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>



TECHNICAL SPECIFICATIONS	GSM7224	GSM7248
SUPPORTED MIBS - CONTINUED		
<ul style="list-style-type: none"> • NETGEAR-QOS-MIB – NETGEAR Flex QOS Support • NETGEAR-QOS-ACL-MIB – NETGEAR Flex QOS ACL • DIFFSERV-MIB - RFC 3289 Management Information Base for the Differentiated Services Architecture • NETGEAR-QOS-DIFFSERV-EXTENSIONS-MIB – NETGEAR Flex QOS DiffServ Private MIBs' definitions • NETGEAR-QOS-DIFFSERV-PRIVATE-MIB – NETGEAR Flex QOS DiffServ Private MIBs' definitions • LLDP-MIB – Management Information Base module for LLDP configuration, statistics, local system data and remote systems data components • LLDP-EXT-DOT3-MIB – The LLDP Management Information Base extension module for IEEE 802.3 organizationally defined discovery information • LLDP-EXT-MED-MIB – The LLDP Management Information Base extension module for TIA-TR41.4 Media Endpoint Discovery information • TACACS-CLIENT-MIB – Management Information Base pertaining to TACACS+ client configuration. 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
MANAGEMENT (IPV4/IPV6)		
<ul style="list-style-type: none"> • SNMP v1, v2c, v3 with multiple IP addresses • Port mirroring support (many-to-one) • Flow-based mirroring • Syslog • File transfer (configuration, firmware) • Secure file transfer (configuration, firmware) • Runtime image download (TFTP) • Port description • sFlow® • Web-based graphic user interface (GUI) • Command Line interface (CLI) • IPv6 Management • Cable test utility • SSLv3/TLSv1.0 Web security for the GUI • Secure Shell (SSHv1, v2) for CLI • Telnet sessions for management CPU (5 sessions) • Configurable management VLAN • Auto Install (DHCP options 66, 67, 150 and 55, 125) with image download • Admin access control via RADIUS or TACACS+ • Dual Image (firmware and configuration) • Text-based configuration file (CLI commands) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>HTTP, TFTP</p> <p>HTTPS, SCP, SFTP</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>HTTP, TFTP</p> <p>HTTPS, SCP, SFTP</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
PHYSICAL SPECIFICATIONS		
<ul style="list-style-type: none"> • Dimensions (w x d x h) - mm • Dimensions (w x d x h) - in • Weight 	<p>440 x 205 x 43 mm</p> <p>17.3 x 8.1 x 1.6 in</p> <p>3.65 kg (8.03 lb)</p>	<p>440 x 205 x 43 mm</p> <p>17.3 x 8.1 x 1.6 in</p> <p>4.15 kg (9.13 lb)</p>
POWER CONSUMPTION		
<ul style="list-style-type: none"> • Max AC Watts • Heat dissipation 	<p>38.5W</p> <p>131 Btu/hr</p>	<p>71.5W</p> <p>244 Btu/hr</p>
ENVIRONMENTAL SPECIFICATIONS		
<p>Operating</p> <ul style="list-style-type: none"> • Temperature • Humidity <p>Altitude</p> <p>Storage</p> <ul style="list-style-type: none"> • Temperature • Humidity <p>Altitude</p>	<p>32° to 131°F (0° to 55°C)</p> <p>90% maximum relative humidity, non-condensing</p> <p>10,000 ft (3,000 m) max</p> <p>– 4° to 158°F (–20° to 70°C)</p> <p>95% maximum relative humidity, non-condensing</p> <p>10,000 ft (3,000 m) max</p>	<p>32° to 131°F (0° to 55°C)</p> <p>90% maximum relative humidity, non-condensing</p> <p>10,000 ft (3,000 m) max</p> <p>– 4° to 158°F (–20° to 70°C)</p> <p>95% maximum relative humidity, non-condensing</p> <p>10,000 ft (3,000 m) max</p>



TECHNICAL SPECIFICATIONS	GSM7224	GSM7248
ELECTROMAGNETIC EMISSIONS AND IMMUNITY		
<ul style="list-style-type: none"> • CE mark, commercial • FCC Part 15 Class A, VCCI Class A • Class A EN 55022 (CISPR 22) Class A • Class A C-Tick • EN 50082-1 • EN 55024 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes
SAFETY		
<ul style="list-style-type: none"> • CE mark, commercial • CSA certified (CSA 22.2 #950) • UL listed (UL 1950)/cUL IEC 950/EN 60950 	<ul style="list-style-type: none"> Yes Yes Yes 	<ul style="list-style-type: none"> Yes Yes Yes
PACKAGE CONTENT		
<ul style="list-style-type: none"> • Switch • Power cord • Rubber footpads for tabletop installation • Rubber caps for the SFP sockets • Mounting kit • DB9 serial cable for console • Resource CD • ProSafe NMS200 Network Management System DVD 	<ul style="list-style-type: none"> GSM7224-200 Yes Yes Yes Rack mount kit Yes Yes Yes 	<ul style="list-style-type: none"> GSM7248-200 Yes Yes Yes Rack mount kit Yes Yes Yes
WARRANTY AND SUPPORT		
<ul style="list-style-type: none"> • ProSafe Lifetime Warranty* • ProSupport Lifetime 24x7 Advanced Technical Support* • Next business day onsite hardware replacement** 	<ul style="list-style-type: none"> Lifetime Lifetime 3 years included** 	<ul style="list-style-type: none"> Lifetime Lifetime 3 years included**
MODULES & ACCESSORIES		
<ul style="list-style-type: none"> • AFM735 (100BASE-FX SFP GBIC) • AGM731F (1000BASE-SX SFP GBIC) • AGM732F (1000BASE-LX SFP GBIC) • RPS5412 (Optimal Power® External Redundant Power Supply) 	<ul style="list-style-type: none"> Yes Yes Yes Yes 	<ul style="list-style-type: none"> Yes Yes Yes Yes
ORDERING INFORMATION		
<ul style="list-style-type: none"> • Americas • Europe • Asia 	<ul style="list-style-type: none"> GSM7224-200NAS GSM7224-200EUS GSM7224-200AJS 	<ul style="list-style-type: none"> GSM7248-200NAS GSM7248-200EUS GSM7248-200AJS
PROSUPPORT SERVICE PACKS		
<ul style="list-style-type: none"> • XPressHW (3-year next-business day hardware replacement contract, applicable where next business day <u>onsite</u> hardware replacement is <u>not</u> available) 	<ul style="list-style-type: none"> Category 2: PRR0332 	<ul style="list-style-type: none"> Category 3: PRR0333

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

** 3-year Next business day onsite hardware replacement support included: see <http://onsite.netgear.com> for coverage, availability and terms and conditions.

+ Lifetime warranty for product purchased after 05/01/2007. For product purchased before 05/01/2007, warranty is 5 years.