



Switching Engineered for AV over IP

Introducing the NETGEAR AV Line of M4250 Switches, developed and engineered for audio/video professionals with dedicated service and support. M4250 has been built from the ground up for the growing AV over IP market, combining years of networking expertise in AV with M4300 and M4500 series with best practices from leading experts in the professional AV market. AV codecs

generally use 1Gbps or 10Gbps per stream and the AV Line of M4250 targets the widespread 1Gbps codecs.

PoE+, Ultra90 PoE++ and rear-facing ports ensure a clean integration in AV racks. M4250 switches come pre-configured for standard audio and video signals. When requirements are more specific, an AV user interface offers customization with port-based profiles. For audio Dante,

Q-SYS and AES67 profiles are available, as well as an AVB profile requiring an AVB license sold separately. For video the M4250 offers profiles for NVX, AMX, Q-SYS, NDI, Dante etc. as well as audio/video/control mixed profiles. When multiple switches are used, NETGEAR IGMP Plus™ brings automation for you to just connect them together, or with M4300 and M4500 switches.

Highlights

Extended AV features

- Dedicated AV web-based GUI interface for more specific AV installations
- Color-based AV profiles can be applied to the different ports
- Dante, Q-SYS, AES67 and AVB audio profiles
- AVB requires a license (sold separately)
- NVX, SVSI, Q-SYS, NDI and Dante video profiles
- Audio / video / control mixed profiles
- Automatic switch interconnect with NETGEAR Auto-Trunk, Auto-LAG and IGMP Plus
- Common Layer 2 and Layer 3 switching engine across all M4250 models

- Built-in IT web GUI, console, telnet and SSH consistent with other NETGEAR M4300 and M4500 series
- Feature set includes static, RIP and PIM routing, DHCP Server and PTPv2

Audio Video Bridging (AVB) services

- AVB is one of the many features designed into the M4250 product line
- AVB is an industry standard for transporting content over a network
- AVB is used most often when very low latency is required such as in live performances when lip sync is critical
- All of the AV Line M4250 switches can be optionally licensed for AVB support

Other IT use cases

- Standard or recessed mounting with all ports in the back, or all ports in the front

- Fully featured L2/L3/L4 platform for midsize Enterprise campus networks, IoT and IPTV

Industry standard management

- Industry standard command line interface (CLI), main NETGEAR IT web interface (GUI), SNMP, sFlow and RSPAN
- Single-pane-of-glass NMS300 management platform with centralized firmware updates and mass-configuration support

Industry leading warranty

- NETGEAR M4250 series is covered under NETGEAR ProSAFE Limited Lifetime Hardware Warranty*
- 90 days of Technical Support via phone and email, Lifetime Technical Support through online chat and Lifetime Next Business Day hardware replacement

Hardware-at-a-Glance

| | | | REAR (REVERSIBLE)* | | | | | LEDs | MANAGEMENT | |
|--------------------|------------------------------------|------------------|--|---------------------------------|----------------------|---|-----------------------------------|---|---|--------------|
| Model Name | Form-Factor | Switching Fabric | 10/100/1000 BASE-T RJ45 ports | 100/1000/2.5G BASE-T RJ45 ports | 1000BASE-X SFP ports | 1000/10G BASE-X SFP+ ports | PSU | Status Information | Out-of-band Console | Model Number |
| M4250-9G1F-PoE+ | Desktop 210 x 40 x 140mm | 20 Gbps | 8 ports PoE+ (110W) 1 additional port | - | 1 port SFP 1G | - | 1 x External Power Adapter (130W) | In Front: Power LED PoE Max LED | Ethernet: 1G Out-of-band (Rear) | GSM4210PD |
| M4250-8G2XF-PoE+ | Desktop 210 x 40 x 140mm | 56 Gbps | 8 ports PoE+ (220W) | - | - | 2 ports SFP+ 1G; 10G | 1 x External Power Adapter (254W) | Fan LED (GSM4210PX only) | Console: USB-C (Front) Storage: USB-A (Rear) | GSM4210PX |
| M4250-10G2F-PoE+ | 1U rackmount 440 x 43.2 x 200mm | 24 Gbps | 8 ports PoE+ (125W) 2 additional ports | - | 2 ports SFP 1G | - | 1 x Fixed (C14) On/off switch | Available both in front and in the rear: Power LED PoE Max LED Fan LED (PoE models) Port LEDs | Ethernet: 1G Out-of-band (Rear) Console: RJ45 RS232 (Rear) Console: USB-C (Rear) Storage: USB-A (Front) LED Ext: USB-C (Front) | GSM4212P |
| M4250-10G2XF-PoE+ | 1U rackmount 440 x 43.2 x 200mm | 60 Gbps | 8 ports PoE+ (240W) 2 additional ports | - | - | 2 ports SFP+ 1G, 10G | 1 x Fixed (C14) On/off switch | | | GSM4212PX |
| M4250-10G2XF-PoE++ | 1U rackmount 440 x 43.2 x 257mm | 60 Gbps | 8 ports PoE++** (720W) 2 additional ports | - | - | 2 ports SFP+ 1G, 10G | 1 x Fixed (C14) On/off switch | | | GSM4212UX |
| M4250-26G4F-PoE+ | 1U rackmount 440x43.2x257mm | 60 Gbps | 24 ports PoE+ (300W) 2 additional ports | - | 4 ports SFP 1G | - | 1 x Fixed (C14) On/Off switch | | | GSM4230P |
| M4250-26G4F-PoE++ | 1U rackmount 440x43.2x400mm | 60 Gbps | 24 ports PoE++ (1,440W)** (1 PSU/720W; 2 PSU/1,440W) 2 additional ports | - | 4 ports SFP 1G | - | 2 x Fixed (C14) On/Off switch | | | GSM4230UP |
| M4250-26G4XF-PoE+ | 1U rackmount 440x43.2x400mm | 132 Gbps | 24 ports PoE+ (480W) 2 additional ports | - | - | 4 ports SFP+ 1G; 10G | 1 x Fixed (C14) On/Off switch | | | GSM4230PX |
| M4250-40G8F-PoE+ | 1U rackmount 440x43.2x400mm | 96 Gbps | 40 ports PoE+ (480W) | - | 8 ports SFP 1G | - | 1 x Fixed (C14) On/Off switch | | | GSM4248P |
| M4250-40G8XF-PoE+ | 1U rackmount 440x43.2x400mm | 240 Gbps | 40 ports PoE+ (960W) | - | - | 8 ports SFP+ 1G; 10G | 1 x Fixed (C14) On/Off switch | | | GSM4248PX |
| M4250-40G8XF-PoE++ | 2U rackmount 440x86.4x350mm | 240 Gbps | 40 ports PoE++ (2,880W)** (1 PSU/720W; 2 PSU/1,650W; 3 PSU/2,880W) | - | - | 8 ports SFP+ 1G; 10G | 3 x Fixed (C14) On/Off switch | | | GSM4248UX |
| M4250-12M2XF | 1U rackmount 440x43.2x100mm | 100 Gbps | - | 12 ports 100M, 1G, 2.5G | - | 2 ports SFP+ 1G, 10G | 1 x Fixed (C14) On/Off switch | | | MSM4214X |
| M4250-16XF | 1U rackmount 440x43.2x200mm | 320 Gbps | - | - | - | 16 ports SFP+ 10G only (First 12 ports support 1G) | 1 x Fixed (C14) On/Off switch | | | XSM4216F |

* Reversed mounting is possible when ports are desired on the front of the rack by using the standard rackmount ears, or the included alternate rackmount ears to mount the switch recessed by 2-Inches to allow for the cabling.

** Ultra90 PoE++ 802.3bt is compatible with 802.3af PoE (15.4W), 802.3at PoE+ (30W) and 802.3bt (60W, 75W and 90W).



GSM4210PX
GSM4210PD

Acoustic-at-a-Glance

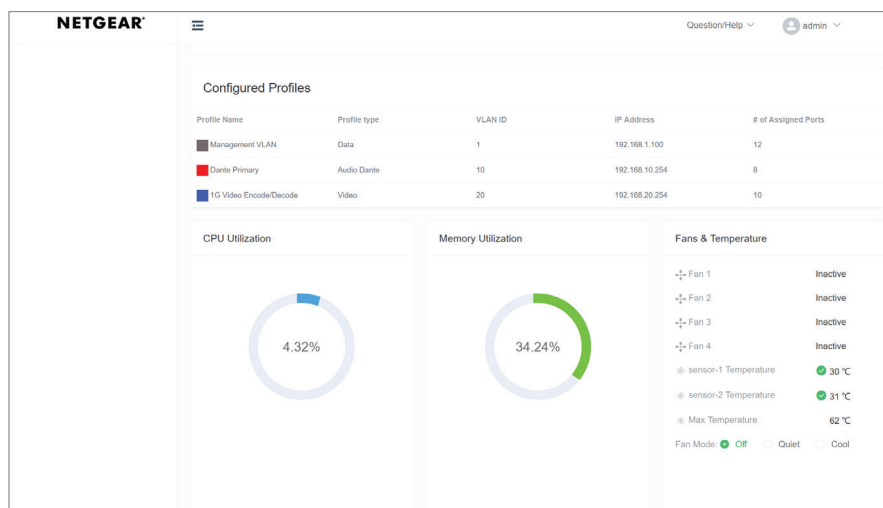
| | FAN OFF MODE Setting / maximum loading* | | | | | QUIET MODE Setting at 25°C ambient** | | | | | COOL MODE Setting at 25°C ambient** | | | |
|--------------------|---|---------------|----------------------------|----------------|---------------------------|--------------------------------------|----------|--------------------------|-----------------|----------|-------------------------------------|--------------------------------------|----------|--------------|
| Model Name | Fanless State | Ambient | Sensor | PoE Power Load | Conditions | PoE Power Load | Fan Duty | Sensor | Case Temp (Top) | Acoustic | Fan Duty | Case Temp (Top) | Acoustic | Model Number |
| M4250-9G1F-PoE+ | The switch is fanless | 25°C | 50°C | 110W | All ports can be used | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | GSM4210PD |
| M4250-8G2XF-PoE+ | 0dBA / 37.4°C Case Temp | 25°C | S1&2 <= 60°C S3 <= 58°C | 180W | RJ45 ports only (no SFP+) | 220W | 10 | <= 60°C | 33.6°C | 19.3dBA | 100 | 28.8°C | 35.3dBA | GSM4210PX |
| M4250-10G2F-PoE+ | 0dBA / 41.8°C Case Temp | 25°C | <= 42°C | 80W | All ports can be used | 125W | 25 | <= 36°C | 35.9°C | 27.38dBA | 100 | 27.2°C | 55dBA | GSM4212P |
| M4250-10G2XF-PoE+ | 0dBA / 39.6°C Case Temp | 25°C | <= 44°C | 90W | All ports can be used | 240W | 25 | <= 37°C | 40.6°C | 27.4dBA | 100 | 30.9°C | 56dBA | GSM4212PX |
| M4250-10G2XF-PoE++ | 0dBA / 44.6°C Case Temp | 25°C | <= 67°C | 45W | All ports can be used | 0-250W | 25 | <= 49°C | 42.9°C | 34.57dBA | 100 | 41.8°C | 66.23dBA | GSM4212UX |
| | | | | | | 250-380W | 30 | <= 49°C | 43.3°C | 40dBA | | | | |
| | | | | | | 380W-500W | 35 | <= 49°C | 44.9°C | 44.22dBA | | | | |
| | | | | | | 500W-720W | 40 | <= 49°C | 52.1°C | 47.19dBA | | | | |
| M4250-26G4F-PoE+ | 0dBA / 40.5°C Case Temp | 25°C | S1 <= 43°C S2 <= 47°C | 45W | 8 ports PoE (no SFP) | 0-200W | 25 | S1 <= 43°C S2 <= 47°C | 43.5°C | 28dBA | 100 | 36.7°C | 57dBA | GSM4230P |
| | | | | | | 200W-300W | 30 | S1 <= 44°C S2 <= 48°C | 51.3°C | 34dBA | | | | |
| M4250-26G4F-PoE+++ | Not Supported | Not Supported | Not Supported | Not Supported | Not Supported | 0-280W | 20 | S1 <= 37°C S2 <= 39°C | 52.9°C | 28dBA | 100 | 720W 36.7°C 1,440W 46°C | 69dBA | GSM4230UP |
| | | | | | | 280W-360W | 25 | S1 <= 38°C S2 <= 40°C | 57.4°C | 36dBA | | | | |
| | | | | | | 360W-420W | 30 | S1 <= 39°C S2 <= 41°C | 54.4°C | 41dBA | | | | |
| | | | | | | 420W-480W | 35 | S1 <= 40°C S2 <= 42°C | 53.3°C | 47dBA | | | | |
| | | | | | | 480W-540W | 40 | S1 <= 41°C S2 <= 43°C | 52.3°C | 50dBA | | | | |
| | | | | | | 540W-600W | 45 | S1 <= 42°C S2 <= 44°C | 54.4°C | 54dBA | | | | |
| | | | | | | 600W-660W | 50 | S1 <= 43°C S2 <= 45°C | 53.6°C | 57dBA | | | | |
| | | | | | | 660W-1,440W | 55 | S1 <= 44°C S2 <= 46°C | 55.7°C | 60dBA | | | | |
| M4250-26G4XF-PoE+ | 0dBA / 43.4°C Case Temp | 25°C | S1 <= 41°C S2 <= 46°C | 45W | 8 ports PoE (no SFP+) | 0-350W | 20 | S1 <= 41°C S2 <= 46°C | 39.3°C | 25dBA | 100 | 32.3°C | 67dBA | GSM4230PX |
| | | | | | | 350W-480W | 30 | S1 <= 42°C S2 <= 47°C | 36.8°C | 42dBA | | | | |
| M4250-40G8F-PoE+ | 0dBA / 45.2°C Case Temp | 25°C | S1 <= 37°C S2 <= 50°C | 30W | 8 ports PoE (No SFP) | 0-150W | 20 | S1 <= 37°C S2 <= 50°C | 43.1°C | 30dBA | 100 | 35.4°C | 68dBA | GSM4248P |
| | | | | | | 150W-200W | 25 | S1 <= 38°C | 42.1°C | 36dBA | | | | |
| | | | | | | 200W-340W | 30 | S1 <= 39°C S2 <= 51°C | 44°C | 40dBA | | | | |
| | | | | | | 340W-480W | 35 | S1 <= 40°C | 47.6°C | 47dBA | | | | |

Acoustic-at-a-Glance

| | FAN OFF MODE Setting / maximum loading* | | | | | QUIET MODE Setting at 25°C ambient** | | | | | COOL MODE Setting at 25°C ambient** | | | |
|--------------------|---|---------|---------|----------------|---------------------------|--------------------------------------|----------|-----------------------|-----------------|----------|-------------------------------------|-----------------|----------|--------------|
| Model Name | Fanless State | Ambient | Sensor | PoE Power Load | Conditions | PoE Power Load | Fan Duty | Sensor | Case Temp (Top) | Acoustic | Fan Duty | Case Temp (Top) | Acoustic | Model Number |
| M4250-40G8XF-PoE+ | Not Supported | | | | | 0-400W | 20 | S1<= 33°C S2<=46°C | 54.2°C | 29dBA | 100 | 36.1°C | 69dBA | GSM4248PX |
| | | | | | | 400W-480W | 25 | S1<= 34°C S2<=47°C | 42.8°C | 35dBA | | | | |
| | | | | | | 480W-560W | 30 | S1<= 35°C S2<=48°C | 41.9°C | 41dBA | | | | |
| | | | | | | 560W-640W | 35 | S1<= 36°C S2<=49°C | 42.1°C | 48dBA | | | | |
| | | | | | | 640W-720W | 40 | S1<= 37°C S2<=50°C | 40.9°C | 51dBA | | | | |
| | | | | | | 720W-800W | 45 | S1<= 38°C S2<=51°C | 40.7°C | 54dBA | | | | |
| | | | | | | 800W-880W | 50 | S1<= 39°C S2<=52°C | 40.4°C | 57dBA | | | | |
| | | | | | | 880W-960W | 55 | S1<= 40°C S2<=53°C | 40.5°C | 59dBA | | | | |
| M4250-40G8XF-PoE++ | Not Supported | | | | | 0-160W | 20 | S1<= 37°C S2<=49°C | 41.3°C | 30dBA | 100 | 720W 31.4°C | 71dBA | GSM4248UX |
| | | | | | | 160W-240W | 25 | S1<= 38°C | 38.8°C | 36dBA | | | | |
| | | | | | | 240W-320W | 30 | S1<= 39°C S2<=50°C | 36.4°C | 42dBA | | | | |
| | | | | | | 320W-400W | 35 | S1<= 40°C | 35.3°C | 49dBA | | | | |
| | | | | | | 400W-480W | 40 | S1<= 41°C S2<=51°C | 34.4°C | 51dBA | | | | |
| | | | | | | 480W-560W | 45 | S1<= 42°C | 34.3°C | 55dBA | | | | |
| | | | | | | 560W-640W | 50 | S1<= 43°C S2<=52°C | 35.1°C | 57dBA | | | | |
| | | | | | | 660W-2,880W | 55 | S1<= 44°C | 36.5°C | 60dBA | | | | |
| M4250-12M2XF | 0dBA / 56°C Case Temp | 25°C | <= 64°C | - | 8 ports 2.5G (no SFP+) | - | 25 | <= 58°C | 53.5°C | 28.5dBA | 100 | 33.2°C | 55dBA | MSM4214X |
| M4250-16XF | 0dBA / 41.3°C Case Temp | 25°C | <= 78°C | - | 8 ports SFP+ | - | 25 | <= 67°C | 41.6°C | 27.44dBA | 100 | 30.3°C | 57dBA | XSM4216F |

* Software-controlled fan adjustments enable the fans to be turned off when ambient temperature and PoE loads are appropriate for a totally fanless operation.

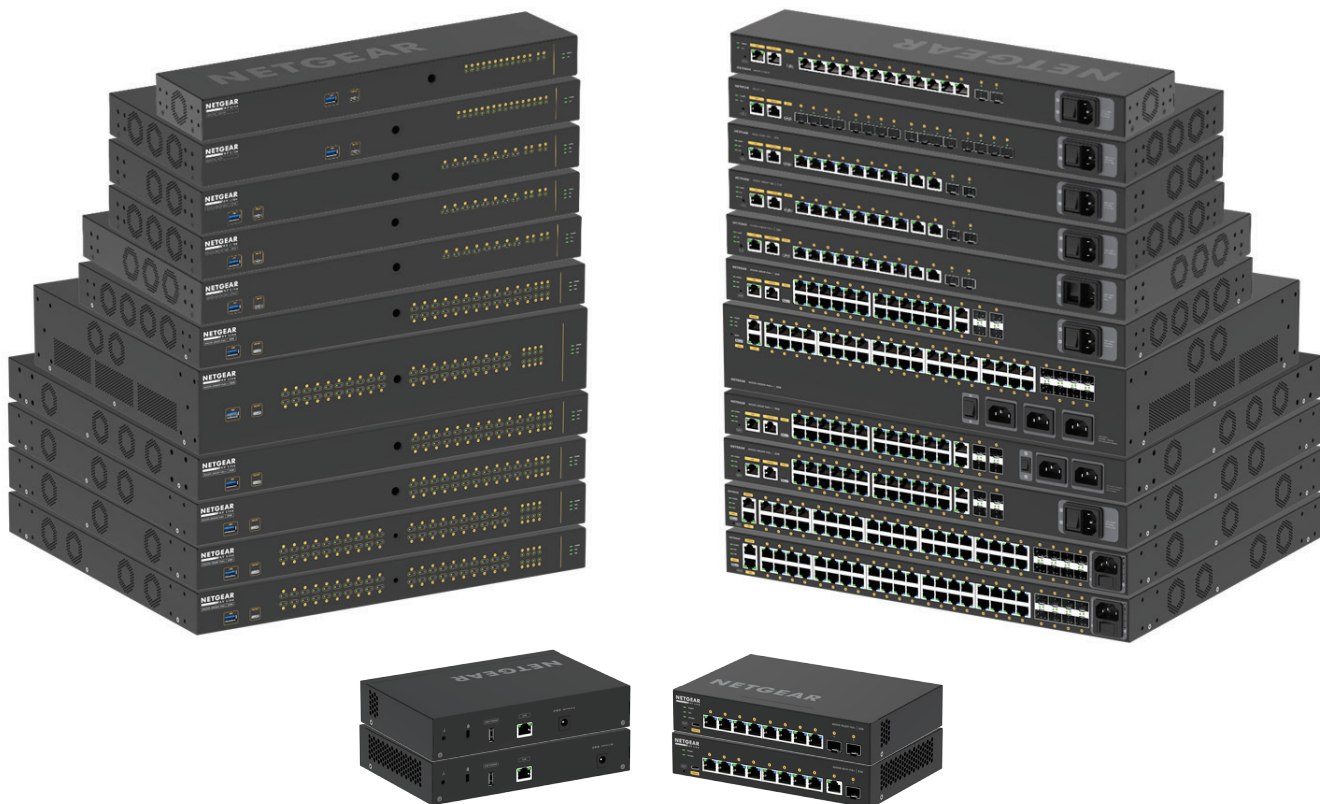
** dBA values are SPL (Sound Pressure Level) values, testing following the ISO-7779 standard. Bystander Mode. Chamber Temp 25°C during testing. Full, 100%, Data and PoE loaded. Worst case.



Software-at-a-Glance

| | LITE LAYER 3 PACKAGE | | | | | | | | | | | |
|--------------|------------------------|--------------------------------|-----------------------------------|--|--|--|-----------------------------|---|--|----------------------------|------------------------------|--------------|
| Model Name | Management | AV Dedicated UI | IPv4 / IPv6 ACL and QoS, DiffServ | IPv4 / IPv6 Multicast Filtering | IPv4 / IPv6 Policing and Convergence | Spanning Tree Green Ethernet | VLANs | Trunking Port Channel | IPv4 / IPv6 Authentication Security | IPv4 / IPv6 Static Routing | IPv4 / IPv6 Dynamic Routing | Model Number |
| M4250 series | | AV web-based GUI | | | Auto-VoIP | | | | | | | |
| | Out-of-band | Designed for AV installers | | NETGEAR IGMP™ Plus for automated IGMP between switches | Policy-based routing (PBR) | STP, MTP, RSTP | Static, Dynamic, Voice, MAC | Auto-Trunk and Auto-LAG between M4250 Switches | Successive Tiering (DOT1X; MAB; Captive Portal) | Port, Subnet, VLAN routing | | |
| | IT Web GUI (main) | AV-related controls | Ingress/ egress | | LLDP-MED | PV(R)STP | | Static LAG, or Dynamic LACP | | | IPv4: RIP | |
| | HTTPs CLI; Telnet; SSH | Audio over IP profiles | 1 Kbps shaping Time-based | IGMPv3 MLDv2 Snooping, Proxy ASM & SSM | IEEE 1588 PTPv2 1-Step End-to-End Transparent Clock | BPDU/STRG Root Guard | GVRP/ GMRP | (LACP automatically reverts to and from Static LAG) | DHCP Snooping Dynamic ARP Inspection IP Source Guard | Multicast static routes | IPv4/IPv6: PIM-SM PIM-DM SSM | |
| | SNMP, MIBs RSPAN | AVB profile* | Single Rate Policing | IGMPv1,v2 Querier (compatible v3) | | EEE 802.3az (EEE is disabled by default) | Double VLAN mode | | | DHCPv4 Server | | |
| | | Video over IP profiles | | | | | | | | DHCP Relay | | |
| | Radius Users, TACACS+ | | | | | | | | | | | |
| | | Mixed Audio and Video profiles | | Control Packet Flooding | AVB*: 802.1AS, 802.1Qav, 802.1Qat MSRP, 802.1ak MMRP, 802.1ak MVRP | | Private VLANs | Seven (7) L2/ L3/L4 hashing algorithms | | Stateful DHCPv6 Server | | All models |

* Requires AVB license, sold separately. All other software features are available, license-free.



Performance-at-a-Glance

| | TABLE SIZE | | | | | | | | | | | | | | | | | | | | |
|--------------------|---------------------|-----------------------------|--------------------|-------------------------------|---------------|---|--|------------------------------|--------------|---------------------------------|----------|---|--|-------------------|-----------|-----------------|----------|---|--|-------------------------------|----------|
| Model Name | MAC ARP/NDP | Routing/ Switching Capacity | Throughput 64-byte | Application Route Scaling | Packet Buffer | Latency | CPU | IP Multicast Routing Entries | Jumbo Frames | Multicast IGMP Group membership | VLANs | DHCP | sFlow | Model Number | | | | | | | |
| M4250-9G1F-PoE+ | 16K MAC 4K ARP/ NDP | 20 Gbps Line-Rate | 14.88 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.27μs 1G | ARM A9 1.25Ghz 32-Bit 2GB RAM | 512 IPv4 128 IPv6 | Up to 12K | 2K IPv4 2K IPv6 | 4K VLANs | DHCP Server: 2K leases IPv4: 256 pools IPv6: 16 pools | 16 samplers 16 pollers 8 receivers | GSM4210PD | | | | | | | |
| M4250-8G2XF-PoE+ | 16K MAC 4K ARP/ NDP | 56 Gbps Line-Rate | 41.67 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.14μs 1G <0.84μs 10G | | | | | | | | GSM4210PX | | | | | | | |
| M4250-10G2F-PoE+ | 16K MAC 4K ARP/ NDP | 24 Gbps Line-Rate | 17.86 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.27μs 1G | | | | | | | | GSM4212P | | | | | | | |
| M4250-10G2XF-PoE+ | 16K MAC 4K ARP/ NDP | 60 Gbps Line-Rate | 44.64 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.14μs 1G <0.84μs 10G | | | | | | | | GSM4212PX | | | | | | | |
| M4250-10G2XF-PoE++ | 16K MAC 4K ARP/ NDP | 60 Gbps Line-Rate | 44.64 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <1.84μs 1G <0.81μs 10G | | | | | | | | GSM4212UX | | | | | | | |
| M4250-26G4F-PoE+ | 16K MAC 4K ARP/NDP | 60 Gbps Line-Rate | 44.64 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.15μs 1G | Quad-Core Cortex-A57 ARMv8 1.8Ghz 64-bit 2GB RAM | | | | | | | 512 IPv4 128 IPv6 | Up to 12K | 2K IPv4 2K IPv6 | 4K VLANs | DHCP Server: 2K leases IPv4: 256 pools IPv6: 16 pools | 16 samplers 16 pollers 8 receivers | GSM4230P | |
| M4250-26G4F-PoE++ | 16K MAC 4K ARP/NDP | 60 Gbps Line-Rate | 44.64 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.15μs 1G | | | | | | | | | | | | | | GSM4230UP | |
| M4250-26G4XF-PoE+ | 16K MAC 4K ARP/NDP | 132 Gbps Line-Rate | 98.21 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.29μs 1G <0.83μs 10G | | | | | | | | | | | | | | GSM4230PX | |
| M4250-40G8F-PoE+ | 16K MAC 4K ARP/NDP | 96 Gbps Line-Rate | 71.42 Mpps | Static: 894v4/126v6 RIP: 32v4 | 32Mb | <2.46μs 1G | | | | | | | | | | | | | | GSM4248P | |
| M4250-40G8XF-PoE+ | 16K MAC 4K ARP/NDP | 240 Gbps Line-Rate | 178.56 Mpps | Static: 894v4/126v6 RIP: 32v4 | 32Mb | <2.74μs 1G <0.73μs 10G | | | | | | | | | | | | | | GSM4248PX | |
| M4250-40G8XF-PoE++ | 16K MAC 4K ARP/NDP | 240 Gbps Line-Rate | 178.56 Mpps | Static: 894v4/126v6 RIP: 32v4 | 32Mb | <2.78μs 1G <0.73μs 10G | | | | | | | | | | | | | | GSM4248UX | |
| M4250-12M2XF | 16K MAC 4K ARP/ NDP | 100 Gbps Line-Rate | 74.40 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <2.84μs 1G <6.02μs 2.5G <0.81μs 10G | | | | | | | | | | | | | | ARM A9 1.25Ghz 32-Bit 2GB RAM | MSM4214X |
| M4250-16XF | 16K MAC 4K ARP/ NDP | 320 Gbps Line-Rate | 238.08 Mpps | Static: 894v4/126v6 RIP: 32v4 | 16Mb | <1.30μs 1G <0.86μs 10G | | | | | | | | | | | | | | | XSM4216F |

Product Brief



The NETGEAR AV Line M4250 series was designed with input from AV Professionals. The result is a line of switches built from the ground up to support 1Gb audio and video over IP with customized hardware and software along with dedicated service and support.

NETGEAR M4250 series key features:

- Ranges from 8 to 48 ports with a variety of PoE+ and Ultra90 PoE++ options for 15.4W, 30W, 60W, 75W and 90W AVoIP endpoints
- Uplink options include 1G for audio installations or standalone video installations as well as 10G uplinks for larger scale video deployments
- Also includes 12-port multi-gigabit Ethernet and 16-port 1G/10G fiber models for plug and play aggregation in a star topology
- Rackmount models designed for a clean integration with traditional, rack-mounted, AV equipment
- The M4250 switches come with a sleek, black display panel with status in front and all cabling plus additional status in the back
- Reversed mounting is possible when ports are desired on the front of the rack
- A second pair of rackmount ears allows the switches to be mounted recessed by 2-inches to allow for the cabling

- Software-controlled fan adjustments enable the fans to be turned off when ambient temperature and PoE loads are appropriate for a totally fanless operation
- Threaded holes on the bottom (4xM5 for 50x100mm VESA) and in front (1xM10 for clamps) allow for universal mounting options outside the rack as well
- New! M4250 desktop versions for use outside of the AV racks in conference rooms, mobile studios, on the wall, under a table or behind a screen

NETGEAR M4250 series AV software features:

- Pre-configured for audio and video over IP out of the box, the M4250 switches enable encoders and decoders to be connected with zero configuration
- When more configuration is required, an AV web-based GUI is available
- This interface has been specially designed for AV installers with specific AV-related controls made more accessible and with port-based profiles

- For audio, profiles for Dante, Q-SYS and AES67 are built-in, as well as an AVB profile (AVB license sold separately)
- For video, the M4250 offers profiles for NVX, SVSI, Q-SYS, NDI, Kramer KDS, Aurora Multimedia, ZeeVee, Atlona, Dante and SDVoE
- Other AV CODECs and manufacturers are supported as well as audio/video/control mixed profiles
- To further simplify star deployments, NETGEAR IGMP Plus™ brings multicast automation between all M4250 switches, and with M4300/M4500
- With Auto-Trunk and Auto-LAG, simply connect M4250 switches together and you are done!

NETGEAR M4250 series other software features:

- All M4250 switches share the same high-end NETGEAR Layer 2 / Layer 3 switching engine for a consistent experience
- All switches in the M4250 series have another main, IT web-based GUI for midsize Enterprise campus networks, IoT and IPTV

- Additional features include static, RIP and PIM-SM, DM and SSM multicast routing, DHCP Server and PTPv2 Transparent Clock (1-step E2E)
- AVB is the only feature requiring a license, all other advanced features are available license-free
- Advanced classifier-based, time-based hardware implementation for L2 (MAC), L3 (IP) and L4 (UDP/TCP transport ports) security and prioritization
- Selectable Port-Channel / LAG (802.3ad - 802.1AX) L2/L3/L4 hashing for fault tolerance and load sharing with any type of Ethernet channeling
- Voice VLAN with SIP, H323 and SCCP protocols detection and LLDP-MED IP phones automatic QoS and VLAN configuration
- Efficient authentication tiering with successive DOT1X, MAB and Captive Portal methods for streamlined BYOD
- Comprehensive IPv4/IPv6 static and dynamic routing including Policy-based routing and 6-to-4 tunneling
- Advanced IPv4/IPv6 security implementation including malicious code detection, DHCP Snooping, IP Source Guard protection and DoS attacks mitigation

NETGEAR M4250 series management features:

- DHCP/BootP innovative auto-installation including firmware and configuration file upload automation
- Industry standard SNMP, RMON, MIB, LLDP, AAA, sFlow, RSPAN and PTPv2
- Service port for out-of-band Ethernet management (OOB)
- Standard RS232 straight-through serial RJ45 and USB Type-C ports for local management console
- Standard USB-A port for local storage, logs, configuration or image files
- Dual firmware image for updates with minimum service interruption
- Single-pane-of-glass NMS300 management platform with mass configuration support
- Industry standard command line interface (CLI) for IT admins used to other vendors commands
- Fully functional Web console (main GUI) for IT admins who prefer an easy to use graphical interface
- Dedicated AV web-based GUI interface available at [switch IP address:8080] for AV installations

NETGEAR M4250 series warranty and support:

- NETGEAR ProSAFE Limited Lifetime Hardware Warranty**
- Included Lifetime Technical Support
- Included Lifetime Next Business Day Hardware Replacement
- Offering free network design services and installation support, the NETGEAR Engineering Services Team is ready to help ensure your 1G deployments with the M4250 AV over IP switches go as smooth as possible. Just drop us an email at ProAVDesign@netgear.com to get started!



GSM4210PX
GSM4210PD

