

Grandstream Layer 3 Managed 48-Port Network Switch (GWN7816)

Product Name: Grandstream Layer 3 Managed 48-Port Network Switch (GWN7816)

Manufacturer: Grandstream

Model Number: GWN7816

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The GWN7816 are 48-port Layer 3 managed network switches that allow medium-to-large enterprises to build scalable, secure, high performance and smart business networks that are fully manageable. It supports advanced VLAN for flexible and sophisticated traffic segmentation, advanced QoS for prioritization of network traffic, IGMP/MLD Snooping for network performance optimization, and comprehensive security capabilities against potential attacks.

The GWN7816 can be managed in several ways, including the local Web user interface of the switch, and CLI, the command-line interface. It is also supported by GDMS Networking and GWN Manager, Grandstream's cloud and on-premise network management platform, and Routers. With an advanced set of features, comprehensive security protection, and flexible management options, the GWN7816 is ideal for enterprises and medium-to-large businesses who require high-performance networks with maximum capacity and control.

Grandstream GWN7816 Key Features

- 48 Gigabit Ethernet ports and 6 10Gigabit SFP+ ports
- Smart power control to support dynamic PoE/PoE+ power allocation per port for the PoE models
- Supports deployment in IPv6 and IPv4 networks
- Reliability features including fault detection, device protection, dual boot, dual system file redundancy, link aggregation, storm control, and more
- ARP Inspection, IP Source Guard, DoS protection, port security & DHCP snooping
- Embedded controller to manage switch, GDMS Networking and GWN Manager, Grandstream's cloud and on-premise network management platform, GWN Series Router, CLI management
- Built-in QoS allows for prioritization of network traffic
- Supports stacking for easy management on one interface while creating redundant backup between multiple devices

Overview

• Network Protocols: IPv4, IPv6, IEEE 802.3, IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3ae, IEEE 802.3az, IEEE 802.3ad, IEEE 802.3x, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1d, IEEE 802.1s, IEEE 802.1w, IEEE 802.1x

• PoE Standards: -

• Gigabit Ports: 48

• 10G SFP+ Ports: 6 Note: Support DAC cable, and must be ≤ 5m

• Maximum Amount of Supported Modules -SM-10G: 6 - MM-10G: 6 - RJ45-10G: 3 Note: RJ45-10G modules must be interval inserted

• Console: 1

• # of PoE Ports: /

• PSUs: 1 PSU of 70W by default, support 1 Hot swap PSU(Purchased Separately)

• Maximum Output Power Per PoE Port: /

• Max Total PoE Output Power: /

• PoE Standards: /

• Surge Protection: ± 4KV CM and ± 2KV DM for power, ± 4KV CM for network ports

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- ESD: +12KV for contact discharge
- Auxiliary Ports: 1x Reset Pinhole
- Forwarding Mode: Store-and-forward
- Total non-blocking throughput: 108Gbps
- Switching Capability: 216Gbps
- Forwarding Rate: 160.704Mpps
- Packet Buffer: 16Mb
- Network Latency: <4µs
- Switching:

- 32K MAC addresses, including static, dynamic, filtering and sticky MAC address
- 4K VLANs, port-based VLAN, IEEE 802.1Q VLAN tagging, MAC-based VLAN, protocol-based VLAN, QinQ
- Private VLAN
- Voice VLAN including auto voice VLAN, tagged OUI and untagged OUI
- 32 VLAN virtual interface with 9216 MTU
- 2K ARP/NDP
- GVRP(pending)
- 32 link aggregation
- Spanning tree, 64 instances for STP/RTSP/MSTP/PVST(+)/RPVST(+)
- ERPS (pending)

• Routing

- 12K(IPv4)/4K(IPv6) routes
- 32(IPv4)/32(IPv6) static routing
- Policy routing (pending)
- Dynamic routing, including RIP, RIPng, OSPF, OSPFv3 and BGP
- Routing Policy
- VRRP(pending)

• Multicast

- IGMP Snooping with IGMPv2 and IGMPv3, 256 IGMP Snooping groups
- MLD Snooping with MLDv1 and MLDv2, 256 MLD Snooping groups
- MVR

• QoS/ACL

- Port priority
- Priority mapping
- Queue scheduling, including SP, WRR, WFQ, SP-WRR and SP-WFQ
- Traffic shaping
- Rate limit
- 4K ACL for Ethernet, IPv4 and IPv6

- DHCP: DHCP server, DHCP relay, DHCP Option 82, 60, 160 and 43
- Maintenance:

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- CPU and memory monitoring
- Fault detection and alarm for power supply and fan
- SNMP including SNMPv1, SNMPv2c, SNMPv3
- RMON
- LLDP&LLDP-MED
- Backup and restore
- Syslog
- Diagnostics including Ping, Traceroute, Mirroring including SPAN and RSPAN, UDLD(pending) and copper test
- Upgrade via FTPS / TFTP / HTTP / HTTPS or local upload, mass provisioning using DHCP Option / TR-069(pending) / GDMS Networking / GWN Manager / GWN router

• Security:

- User hierarchical management and password protection, HTTPS, SSH, Telnet
- Identity authentication including 802.1X authentication and MAC authentication
- AAA authentication including RADIUS, TACACS+
- Storm control
- Port isolation, port security, sticky MAC
- Filtering MAC address
- IP/IPv6 source guard, DoS attack prevention, ARP inspection
- DHCP/DHCPv6 Snooping
- Loop protection including BPDU protection, root protection and loopback protection
- Kensington Security Slot (Kensington Lock) support

• Mounting: Desktop, or Rack-Mount (rack-mounting kits included)

• LEDs:

- 1x tri-color LED for device tracking and status indication
- 2x bi-color LEDs for per power supply PSU1/2
- 54x green-color LEDs for data transferring
- 48x yellow-color LEDs for PoE powered (GWN7816P)

• Fan: 4

- Environmental: Operation: 0°C to 45°C, humidity 10-90% RH(Non-condensing), Storage: -10°C to 60°C, humidity: 10% to 90% RH(Non-condensing)
- Dimensions: 440mm(L)x300mm(W)x44mm(H)
- Unit Weight: 4.7Kg
- Package Content:

- 1x Switch
- 1x 1.2m AC Cable
- 1x 25cm Ground Cable
- 4x Rubber Footpads
- 2x Front Rack-Mounting Kits
- 8x Screws(KM 3*6)
- 1x Simplified Quick Installation Guide
- 1x Regulatory Paper

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1/2 Hot-Swappable: PSU Available for Separate Purchase
1/2 Compliance: FCC, CE, RCM, IC, UKCA

Price: Â£359.40
