GRANDSTREAM
CONNECTING THE WORLD

Enterprise Layer-2+ Managed Network Switch

GWN7800 Series

The GWN7800 series are Layer-2+ managed network switches that allow small-and-medium enterprises to build streamlined business networks with the intelligence to separate and prioritize voice, video and data traffic based on business needs. They provide VLAN support for traffic segmentation, advanced QoS for traffic prioritization, a built-in firewall for enterprise-level security and support IMG Snooping to optimize the performance of critical business networks. The GWN7800 series comes in 6 model options that range from 8 to 24 Gigabit ports while all models include 2 Gigabit fiber ports. The GWN7801P, GWN7802P and GWN7803P provide integrated PoE to provide power to IP phones, video conferencing devices, Wi-Fi access points and similar devices. To ensure easy installation and management, the GWN7800 series can be managed by any GWN series router as well as GWN.Cloud and GWN Manager, Grandstream's free cloud and on-premise network management platform. By combining network traffic segmentation and prioritization with enterprise-grade security and optimization tools, the GWN7800 series provides a plug-and-play managed network switch ideal for small-to-medium enterprises.

Gigabit

8, 16 or 24 Gigabit ports with 2 Gigabit SFP ports

PoE

Models available with PoE; complies with 802.3af/at standard, provides up to 30W per port

Supports deployment in IPv6 and IPv4 networks, as well as networks that utilize both protocols

Provides quaternary binding of IP, MAC, VLAN & port; ARP Inspection, IP Source Guard, DoS protection, port security & DHCP snooping

Managed by GWN.Cloud & GWN Manager, which offers cloud or premise-based software management, as well as Grandstream routers

QoS

Advanced QoS can prioritize voice and video traffic through port priority, priority mapping, queue scheduling, traffic shaping & rate limit

	GWN7801	GWN7801P	GWN7802	GWN7802P	GWN7803	GWN7803P
Network Protocol	IPv4, IPv6, IEEE 802.3, IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.3af/at, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1w, IEEE 802.1d, IEEE 802.1s					
Processor	RTL8380M			RTL8382M		
Memory	1GB DDR3/32MB Flash			1GB DDR3/32M Flash		
Gigabit Ports	8		16		24	
Fiber Ports	2					
Console	1					
# of PoE Ports	/	8	/	16	/	24
Maximum Output Power of Per PoE Port	/	30W	/	30W	/	30W
PoE Output Power in Total	/	124W	/	250W	/	372W
PoE Standards	/	IEEE 802.3af/at	/	IEEE 802.3af/at	/	IEEE 802.3af/at
Power Input	100-240V AC, 50/60Hz					
Power Output	12VDC 1.5A(<18W)			12VDC 1.5A(<24W)		
Surge Protection	6KV for switch, 4KV common-mode for network ports					
Auxiliary Ports	1x Reset Pinhole					
Forwarding Mode	Store-and-forward					
Switching Capability	Unknown					
Packet Forwarding Rate	Unknown					
MTBF	Unknown					
Packet Buffer	4.1MB					
Switching	• 8K static, dynamic and filtering MAC addresses • 4K VLANs, port-based VLAN, IEEE 802.1Q VLAN tagging, voice VLAN • VLAN virtual interface • GVRP • 8 link aggregation • Spanning tree, 16 instances for STP/RSTP/MSTP					
Routing	Static routing					
Multicast	IGMP Snooping MLD Snooping MVR					
QoS/ACL	• Port priority • Priority mapping • Queue scheduling, including SP, WRR, WFQ, SP-WRR and SP-WFQ • Traffic shaping • Rate limit • 1.5K ACL for Ethernet, IPv4 and IPv6					
DHCP	DHCP server, DHCP relay, Option 82, 60,160 and 43					
Maintenance	CPU and memory monitoring, SNMP, RMON, LLDP&LLDP-MED, backup and restore, syslog, alert, diagnostics including Ping, Traceroute, port mirroring, UDLD(TBD) and copper test					
Security	• User hierarchical management and password protection, HTTPS, SSH, Telnet • 802.1X authentication • AAA authentication including RADIUS, TACACS+ • Storm control • Port isolation, port security, sticky MAC • Filtering MAC address • IP source guard, DoS attack prevention, ARP inspection • DHCP Snooping • Loop protection including BPDU protection, root protection and loopback protection • Kensington Security Slot (Kensington Lock) support					
Mounting	Desktop-mountable, Wall-mountable			Desktop-mountable, Rack-mountable or wall-mountable with rack-mount brackets(included)		
LEDs	1x tri-color LED for device tracking and status indication, 10x green LEDs for data ports	1x tri-color LED for device tracking and status indication, 10x green-color LEDs for data ports, 8x yellow-color LEDs for PoE ports	1x tri-color LED for device tracking and status indication, 18x green LEDs for data ports	1x tri-color LED for device tracking and status indication, 18x green-color LEDs for data ports, 16x yellow-color LEDs for PoE ports	1x tri-color LED for device tracking and status indication, 24x green LEDs for data ports	1x tri-color LED for device tracking and status indication, 26x green-color LEDs for data ports, 24x yellow-color LEDs for PoE ports
Fan	????					
Environmental	Operation: 0°Cto 45°C, humidity 10-90% RH(Non-condensing) Storage: -10°C to 60°C, humidity: 5% to 95%(Non-condensing)					
Dimensions	330mm(L)x175mm(W)x44mm(H)			440mm(L)x200mm(W)x44mm(H)		
Unit Weight(TBD)	1.8Kg	2Kg	2.6Kg	3Kg	2.7Kg	3.3Kg
Package Content	Switch, Universal Power Supply, 1x 1.2m(10A) AC Cable, 1x Ground Cable, 1x Rubber Feet, 1x Power Cord Anti-Trip(Optional), 1x Console Cable(Optional)			Switch, Universal Power Supply, 1x 1.2m(10A) AC Cable, Rack-mounting Standard Brackets, 1x Ground Cable, 1x Rubber Feet, 1x Power Cord Anti-Trip(Optional), 1x Console Cable(Optional)		
Compliance	FCC, CE, RCM, IC, UKCA					
Warranty	8-year lifetime in 25°C environment					

Features & Benefits

Powerful Business Processing Capabilities

- Support static routing to realize routing data communication between different network segments. Simpler, more efficient and more reliableSupport DHCP Server and Relay to assign IP address to hosts in the network.
- Support GVRP to realize VLAN dynamic distribution, registration and attribute propagation, reduce the amount of manual configuration, and ensure the correctness of configuration.
- Support QoS, including Port Priority, Priority Mapping, Queue Scheduling, Traffic Shaping and Rate Limit.
- Support ACL to realize the filtering of data packets by configuring matching rules, processing operations and time schedule, and provide flexible security access control policies.
- Support IGMP Snooping and MLD Snooping to meet the needs of multi-terminal HD video surveillance and video conference.
- Support IPv6 to meet the needs of the network transition from IPv4 to IPv6.

Multiple Security Prevention Mechanism

- Support static MAC table, dynamic MAC table to allow data transmission, and filter MAC table to avoid network attacks.
- Support quaternary binding of IP address, MAC address, VLAN and port to filter data packets.
- Support ARP Inspection to protect against ARP spoofing and ARP flooding attacks such as gateway spoofing and man-in-the middle attacks that are common in LANs.
- Support IP Source Guard to prevent illegal address spoofing including IP/MAC/VLAN spoofing and IP/VLAN spoofing.
- Support DoS Protection, including Land Attack, Smurf Attack, TCP SYN Attack, Ping Flooding and more.
- Support 802.1X, RADIUS, AAA, TACACS+ authentications to provide authentication function for LAN devices.
- Support port security. When the number of MAC addresses learned by a port reaches the maximum number, it will be set to error-down status automatically or stop learning to prevent MAC address attack and control the network traffic of the port.
- Support DHCP Snooping, discards illegal packets. Keep the validity of DHCP server by the trusted feature of port.

Diverse Reliability Protection

- Support STP/RSTP/MSTP to guarantee fast convergence, improve fault tolerance, ensure stable network and link load balance, and provide redundant link utilization.
- Support loopback detection to keep the port in normal use.
- Support VRRP(pending) to effectively ensure network stability.
- Support link aggregation to increase bandwidth, improve reliability and load balancing.
- Support storm control to prevent traffic impact.

PoE Power Supply Capability(Only GWN7800P series support)

- Support PoE power supply and comply with the IEEE 802.3af/at standards to meet the PoE power supply requirements of security monitoring, audio and video conferencing, wireless signal coverage and more scenarios.
- Support setting user-defined time period to control the power supply of PoE port on Web GUI.
- Support setting priority of PoE port on Web GUI. When remaining power is insufficient, it will power the device of high-priority port.
- The maximum output power is 30w per port. Users can set the maximum power that can provide via Web GUI.

Easy Management and Maintenance

- Support managed by Web GUI, CLI(Console, Telnet) and SNMP(v1/v2c/v3).
- Support monitoring CPU and memory, Ping, Traceroute, UDLD(TBD) and Copper Test to analysis failed network nodes easily.
- Support RMON, Syslog, traffic statistics and sFlow(pending) to optimize network.
- Support LLDP and LLDP-MED for convenient query and communication status judgment.
- Support managed by GWN.Cloud and GWN Manager, and also support managed by GWN700X&GWN701X router

IPv4/IPv6 Dual Protocol Stack

- Support IPv4 routing protocol, including IPv4 static routing to satisfy different networking needs.
- Support IPv6 routing protocols, including IPv6 static routing to satisfy different networking needs.
- Not only deployed in pure IPv4 or IPv6 networks, but also deployed both in IPv4 and IPv6 networks, to fully meet the networking needs.