SWM-2800

10 GIGABIT ETHERNET SWITCH
LAYER 3 - ACCESS & AGGREGATION

**4~6X 10GE
24~48X GE**

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LAYER 3
RIP, OSPF
IP v4 & v6

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**VIRTUAL
SWITCH**
STACKING 16

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RESILIENCY
EAPS, ERPS

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FIREWALL
L2-L4
cybersecurity

Description

SWM-2800 series are new generation layer 3 Lite switches that provide high density of Gigabit interfaces and 10 Gigabit uplink ports in a compact 1U/19'' format. Various models deliver up to 4 or 6x 10GE SFP+ and 24 or 48 GE ports with a choice of RJ45, POE+ and SFP options.

SWM-2800 have an Ethernet and IP feature rich software with a dual stack for IP v4 and v6 routing, layer 2/3/4 firewall filters with best performance

SWM-2800 are stackable switches to make a secure and larger capacity virtual switch. Up to 16 switches can be cascaded to build a virtual routing switch of 800 Ethernet ports.

SWM-2800 supports extensive resiliency, cybersecurity and management functionalities that enable 99.999% service availability that is required by mission critical networks : RSTP/MSTP, LACP, 802.3ah, 802.1X, Radius, etc. Resilient architectures rely on EAPS and ERPS with very fast recovery and no service interruption.

SWM-2800 embeds a dual IP v4 and v6 software stack with complete set of protocols including OSPF v3, but also ISATAP and 6to4 tunnels.

SWM-2800 responds to the more and more demanding cybersecurity requirements. Its hardware architecture has specific functions to prevent from DOS attack at the ingress interface such as Syn-flood and broadcast storm. Connections are authenticated through 802.1X and management sessions through Radius. The firewall function performs wirespeed filtering at layer 2/3/4.

SWM-2800 has been designed for some industrial requirements with a higher operating temperature of 65 °C and a low power consumption. It complies with the IEEE 802.3az standard for efficient use of energy. The equipment supports several software features to monitor and control the power consumption.

Applications

SWM-2800 switches are perfect solutions in many Ethernet network at the access and aggregation levels with layer 2/3 security and routing functions:

- Enterprise : Gigabit access with POE options, 802.1X authentication and VLAN
- Defense : secured Ethernet network
- IP v4 to v6 migration : dual stack IP v4/v6 and 6to4 tunnelling
- Enterprise or FTTH optical distribution network
- POE+ access for VoIP or IP camera with multicast traffic control

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## Stacking

High density Virtual Switch

SWM-2800 switches support virtualization and stacking to provide switching and management of a larger virtual system. Up to 16 switches can be stacked to deliver 32x 10GE ports and 768 GE ports with a choice of RJ45, SFP and POE options.

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Virtual switch of 16x SWM-2800
- Up to 768 Gigabit ports
- Up to 32x 10 Gigabit ports
- 3 Tbps switching capacity

Enterprise Access switch

SWM-2800 are very flexible Ethernet switches in enterprises and other infrastructures demanding on security and traffic engineering. They provide aggregation and distribution features to reduce CAPEX and maintenance efforts. The multiple 10 Gigabit interfaces connect to other aggregation and core switches with an optimized bandwidth performance. SWM-2800 support IP v4/v6 routing and aggregation traffic filtering at wirespeed to enable best network security and user quality experience.

Internet

SERVERS

SWM-3800
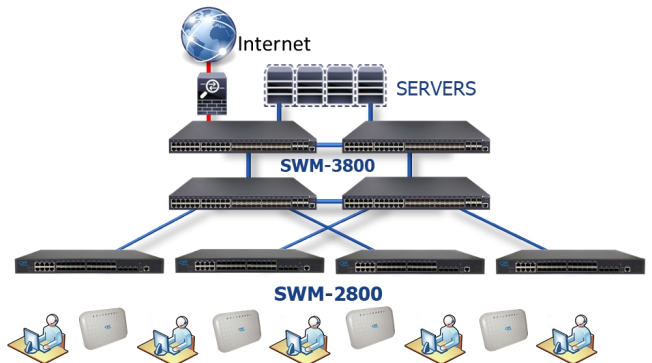
SWM-2800

Mission Critical Networks

SWM-2800 perform traffic aggregation and control in mission critical networks of many industrial infrastructures such as electricity or water distribution, video-protection, intelligent traffic and Smart-City systems, Defense and emergency services, etc.

SWM-2800 brings several benefits such as a mix of RJ45 / POE / SFP interfaces, extensive layer 2 and 3 protocols, G.8032 resiliency that improve service availability.

SWM-2800 respond the more demanding cybersecurity requirements of the mission critical networks thanks to ACL filtering, 802.1X authentication, DOS attack prevention. The equipment management is secured by Radius encryption and authentication protocols.

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Specifications

Ethernet Ports	
10GE Uplink	• 4 to 6x SFP+ 10 GE / GE
User ports	• 24 to 48x Gigabit ports, 10/100/1000BT or SFP 100FX/1000FX • 802.3az energy saving

Ethernet Switch	
Backplane	• 216 Gbps
Switching	• 162 Mpps
MAC address memory	• 16 K
Max frame size	• 9 K

Ethernet Services	
VLAN	4K VLAN, GVRP, Provider Bridge / Q-in-Q, PVLAN, 1:1 mapping, N:1 mapping, Voice-VLAN
Multicast	IGMP v1/2/3, IGMP Snooping, IGMP Group, IGMP Fast Leave, PIM-SM, PIM-DM, MVR, IGMP Filter
QoS	Rate limiting, L2-L4 CoS, 802.1P DSCP, Strict-Priority / WRR / SP+WRR, WRED, QoS on MAC/IP/TCP/UDP/VLAN/COS/DSCP/TOS, priority relabelling
Redundancy	STP, RSTP, MSTP, BPDU protection, EAPS, ERPS

Layer 3 Routing	
IP v4	Static routing, RIP v1/2, OSPF, 2 K routing table (IP v4 + v6)
IP v6	Static routing, RIP, OSPF v3 2 K routing table (IP v4 + v6) 6 to 4 tunnel, ISATAP tunnel MLD v1/v2, MLD Snooping

Resiliency and Security	
Layer 2	802.1X, port isolation, DDoS attack prevention, TCP Sync flood prevention, uRPF, LACP, EAPS, PPPoEiA
Layer 3	DHCP snooping and option 82
Firewall	ACL L2/L3/L4, filtering and authentication
Management	Radius, Tacacs+, 802.1X

Management	
Local Console	CLI
Ethernet IP	Telnet, SSH, http, https, Snmp v1/v2/v3, tftp, sftp, RMON, sFLOW
OAM	802.3ah, Y.1731
Other	NTP, LLDP

General Characteristics	
Power supply	• 110-230 Vac, 50/60 Hz
Dimensions	• 350 x 44 x 180 / 210 / 280 mm
Environment	• operating temperature: -20 to 65 °C • stocking temperature : -20 to +70 °C

Range of products

SWM-2828-S-A

Ordering information and specifications

Description	10GE Layer 3 Lite Switch , IP v4/v6, RIP, OSPF, 1U/19'', 1x 110-230 Vac power input 19'' mounting kit				
Reference	**SWM-2828-R-A**	**SWM-2828-S-A**	**SWM-2854-R-A**	**SWM-2828-P-A**	**SWM-2854-P-A**
10GE	4	4	6	4	6
GE RJ45	24	8	48	-	-
GE SFP	-	16+8	-	-	-
GE.POE+	-	-	-	24	48
Temp °C	65°C	65°C	65°C	55°C	55°C
Dimensions	440x180x44	440x280x44	440x280x44	440x210x44	440x300x44
Power Supply AC 100-240VAC	45W	45W	50W	410W	450W
POE budget	-	-	-	370W	370W