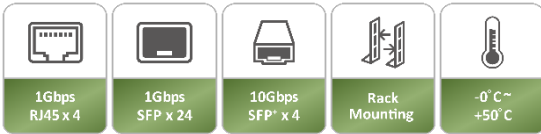


Commercial Ethernet Switches

L2+ Managed Switch – 4 x 10/100/1000Mbps RJ45, 24 x 100M/1Gbps SFP and 4 x 1G/2.5G/10Gbps SFP+ Ports

CMS-428XGF Commercial L2+ Managed Switch



- ☑ Built-in 24x Gigabit SFP Ports for flexible, high-speed fiber connectivity
- ☑ IEEE 802.3az Energy Efficient Ethernet for optimized power consumption
- ☑ Non-blocking Switching Architecture ensures full wire-speed forwarding without data loss
- ☑ Integrated DHCP Server, Relay, and Snooping for efficient IP address management
- ☑ Layer 2+ Full Managed Features, including MSTP, LACP, LLDP, sFlow, 802.1X, RADIUS, TACACS+, and ACL
- ☑ Multicast Support, including IGMP Snooping (v1/v2/v3), IGMP Proxy, IGMP Querier, MVR, and MLD Snooping (v1/v2)
- ☑ Auto Discovery of IP Devices and Network Continuity Testing for simplified diagnostics

INTRODUCTION

The DSGio CMS-428XGF managed switch is engineered for medium to large-scale network deployments, delivering a high-bandwidth, non-blocking switching fabric that enables low-latency, high-speed data transmission.

It features multi-rate SFP+ uplinks to support scalable network expansion and offers link aggregation to maximize throughput and redundancy. With IEEE-compliant standards, the switch ensures reliable and continuous operation of connected IP devices. Comprehensive Layer 2+ management capabilities—including VLAN, QoS, and advanced security features—enhance network segmentation, traffic prioritization, and access control. Housed in a 19-inch rack-mountable chassis, the switch integrates seamlessly into enterprise and data center environments.

PRODUCT SPECIFICATIONS

Interface	
10M/100M/1000Mbps RJ45 Port	4
100M/1Gbps SFP Slot	24
1G/2.5G/10Gbps SFP+ Slot	4
RJ45 Console Port for CLI Management	1

System Performance		
Packet Buffer		32Mb
NAND Flash Memory		2Gb
NOR Flash Memory		256Mb
SDRAM Memory (DDR3)		4Gb
MAC Address Table Size		32K
Jumbo Frame		10K
Switching Capacity		136Gbps
Forwarding Rate (64-byte)		101.184Mpps
L2 Features		
Auto-Negotiation		●
Auto MDI/MDI-X		●
Flow Control (Duplex)	802.3x (Full)	●
	Back-Pressure (Half)	●
Spanning Tree	IEEE 802.1D (STP)	●
	IEEE 802.1w (RSTP)	●
	IEEE 802.1s (MSTP)	●
VLAN	VLAN Group	4096
	Tagged Based	●
	Port-Based	●
	Q-in-Q	●
	Voice VLAN	Voice VLAN with OUI
	MAC-based/Protocol-based/IP Subnet-based VLAN	●
Link Aggregation	IEEE 802.3ad with LACP	●
	Static Trunk	●
	Max. Static Aggregation Group	16
	Max. Port per Static Agg. Group	8
IGMP Snooping	IGMP Snooping v1/v2/v3	Supports 1024 IGMP Groups
	IGMP Static Multicast Addresses	Supports 1024 Static Multicast Addresses
	IPv6 MLD Snooping	Supports 1024 MLD Groups
	MLD Static Multicast Addresses	Supports 1024 Static Multicast Addresses
	Querier, Immediate Leave	●
Storm Control (Broadcast/Multicast/Unknown Unicast)		●
Loop Protection		●
QoS Features		
Number of Priority Queue		8 Queues/Port
Rate Limiting	Ingress	Yes, 1 KBps/1pps
	Egress	Yes, 1 KBps/1pps
DiffServ (RFC2474 Remarking)		●
Scheduling (WRR, Strict, Hybrid)		●
CoS	IEEE 802.1p	●
	IP ToS Precedence, IP DSCP	●

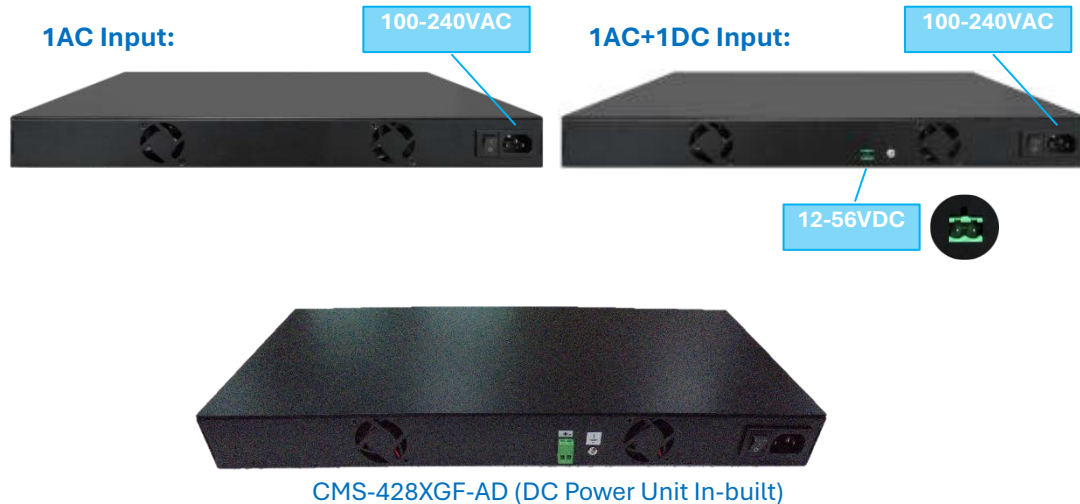
Security	
Management System User Name/Password Protection	●
User Privilege	Set User Privilege up to 15 Level
Port Security (MAC-based)	●
IEEE 802.1x Port-based Access Control	●
ACL (L2/L3/L4)	●
IP Source Guard	●
RADIUS (Authentication, Authorisation, Accounting)	●
TACACS+	●
HTTP & SSL (Secure Web)	●
SSH v2.0 (Secured Telnet Session)	●
MAC/IP Filter	●
DHCP Snooping (DHCP Protection)	●
Port Isolation	●
BPDU Guard	●
STP Root Guard/Edge Safe Guard/Restricted Role	●
Dynamic ARP Protection	●
Management	
Command Line Interface (CLI)	●
Web Based Management	●
Telnet	●
Access Management Filtering	SNMP/Web/SSH/Telnet
Firmware Upgrade via HTTP	●
Dual Firmware Images	●
Configuration Download / Upload	●
SNMP (v1/v2c/v3)	●
RMON (1, 2, 3 & 9 Groups)	●
DHCP (Server/Client/Relay/Option 82/Snooping)	●
System Event/Error Log	●
TFTP (Trivial File Transfer Protocol)	●
NTP/LLDP	●
Cable Diagnostics	●
IPv6 Configuration	●
Port Mirroring	●
Physical Characteristics	
Dimension (W x H x D)	440 x 44 x 220 mm
LED Indicator	Power, Speed, Link/Act.
Cooling	Fan Cooling
Enclosure	Metal
Installation	Desktop / Rack Mount
Weight	3.1Kg

System Power Requirements	
System Power Input	12VDC
Max. System Power Consumption	50W
Power Supply Information	
Internal Power Supply	Input: 100-240 V~, 50-60Hz, 2.0A Max.
	Output: 12VDC/8.33A
Redundant Power Supply	Input: 100-240 V~, 50-60Hz, 1.8A Max.
	Output: 12VDC/6.25A
Environment Limits	
Operating Temperature	0 ~ 50°C
Storage Temperature	-20 ~ 80°C
Operating Humidity	10 ~ 90% RH (Non-condensing)
Storage Humidity	10 ~ 90% RH (Non-condensing)
Protection and Alarms	
ESD	DC Contact 4KV, Air 8KV
Surge	AC Line to Line 1KV, Line to Ground 2KV
Certifications	
Electromagnetic Emissions (EMC)	CE, FCC, UKCA
Safety	EN62368-1
Standard	
IEEE 802.3 – 10Base-T	●
IEEE 802.3u – 100Base-TX	●
IEEE 802.3ab – 1000Base-T	●
IEEE 802.3z – 1000Base-SX/LX	●
IEEE 802.3ae – 10GBase (SFP+)	●
IEEE 802.3az – Energy Efficient Ethernet (EEE)	●
IEEE 802.3x – Flow Control	●
IEEE 802.3ad – Link Aggregation Control Protocol (LACP)	●
IEEE 802.1Q – VLAN Tagging	●
IEEE 802.1v – Protocol-Based VLAN	●
IEEE 802.1p – Class of Service (CoS)	●
IEEE 802.1D – Spanning Tree Protocol (STP)	●
IEEE 802.1w – Rapid Spanning Tree Protocol (RSTP)	●
IEEE 802.1s – Multiple Spanning Tree Protocol (MSTP)	●
IEEE 802.1AB – Link Layer Discovery Protocol (LLDP)	●
IEEE 802.1X – Port-Based Network Access Control	●
ITU-T G.8032/Y.1344 – Ethernet Ring Protection Switching (ERPS)	●

Power Supply Unit Bundle Configuration

Model No.	Power Input	Operating Temperature
CMS-428XGF	100-240VAC	0 ~ 50°C
CMS-428XGF-AD	100-240VAC and 12-56VDC	0 ~ 50°C

Model Name Abbreviation with **AD** denotes **Dual Power Input**



PACKAGE CONTENTS

- 1 × L2+ Managed Switch
- 1 × Console Cable
- 1 × Rackmount Kit
- 1 × Power Cord
- 1 or 2 x Power Supply Unit (1 AC, or 1 AC + 1 DC) (*depending on ordered SKU*)

Note: For CMS-428XGF-AD Model, customer must provide their own 2-wire power cord for the redundant DC power supply unit.

WARRANTY

- Standard 1-Year Limited Warranty, unless otherwise specified by Sales.
- Optional Advance Replacement Warranty is available upon request

ORDERING INFORMATION

Part Number	Descriptions
CMS-428XGF	L2+ Managed Switch with 4 x 10/100/1000Mbps RJ45 Ports, 24 x 100M/1Gbps SFP Ports, and 4 x 1/2.5/10Gbps SFP+ Ports, Single Internal PSU
CMS-428XGF-AD	L2+ Managed Switch with 4 x 10/100/1000Mbps RJ45 Ports, 24 x 100M/1Gbps SFP Ports, and 4 x 1/2.5/10Gbps SFP+ Ports, Dual Power Input (1 AC + 1 DC)
(Optional Network Transceivers)	
CNT-SFP-SX550	1.25Gbps SFP Optical Transceiver, DDM, 1000BASE-SX, 850nm, Duplex LC, up to 550m over MMF (50/125µm) or 300m over MMF (62.5/125µm), Temp: 0°C ~ 70°C
CNT-SFP-LX10	1.25Gbps SFP Optical Transceiver, DDM, 1000BASE-LX, 1310nm, Duplex LC, up to 10Km over SMF (9/125µm), Temp: 0°C ~ 70°C
CNT-SFP-SR300	10Gbps SFP+ Optical Transceiver, 10GBASE-SR, 850nm, Duplex LC, up to 300m over MMF (50/125µm), Temp: 0°C ~ 70°C
CNT-SFP-LR10	10Gbps SFP+ Optical Transceiver, 10GBASE-LR, 1310nm, Duplex LC, up to 10Km over SMF (9/125µm), Temp: 0°C ~ 70°C
(Optional Slim CAT6a Ethernet Patch Cord)	
C6A28-TPE-04BL	CAT6A Patch Cord, 28AWG Stranded, UTP, Snagless, TPE, Blue – 4ft / 1.2m
C6A28-TPE-05BL	CAT6A Patch Cord, 28AWG Stranded, UTP, Snagless, TPE, Blue – 5ft / 1.5m
C6A28-TPE-07BL	CAT6A Patch Cord, 28AWG Stranded, UTP, Snagless, TPE, Blue – 7ft / 2.1m
C6A28-TPE-10BL	CAT6A Patch Cord, 28AWG Stranded, UTP, Snagless, TPE, Blue – 10ft / 3.0m
C6A28-TPE-15BL	CAT6A Patch Cord, 28AWG Stranded, UTP, Snagless, TPE, Blue – 15ft / 4.6m

CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

- **Website:** www.dsgio.com
- **Email:** sales.apac@dsgio.com

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