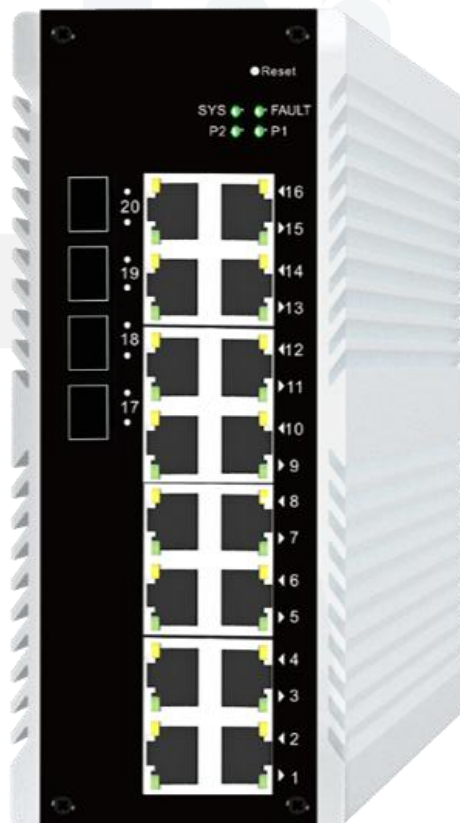
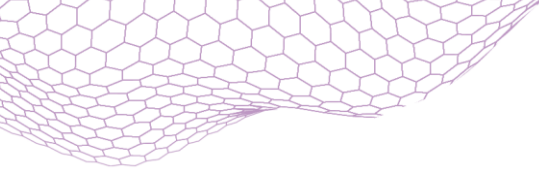


20 PORT LAYER 2+

INDUSTRIAL ETHERNET MANAGED SWITCH-GIGA POE

DDPSMG CF SERIES





SYNOPSIS

- THE DDPSMG 3016-4S CF IS A FULL GIGABIT L2 MANAGED INDUSTRIAL ETHERNET FIBER SWITCH INDEPENDENTLY DEVELOPED BY DATABRIDGE DYNAMIC.
- IT HAS 16*10/100/1000BASE-T POE PORTS AND 4*100/1000BASE-X SFP FIBER PORTS.
- EACH PORT CAN SUPPORT WIRE-SPEED FORWARDING.
- THE DDPSMG 3016-4S CF HAS L2 NETWORK MANAGEMENT FUNCTION, COMPLETE SECURITY PROTECTION MECHANISM, ACL/QOS POLICY AND RICH VLAN FUNCTIONS, EASY TO MANAGE AND MAINTAIN.
- SUPPORT MULTIPLE NETWORK REDUNDANCY PROTOCOLS STP/RSTP/MSTP(<50MS), SUPPORT ERPS RING NETWORK FUNCTION (CONVERGENCE TIME<20MS) TO IMPROVE LINK BACKUP AND NETWORK RELIABILITY TO ENSURE UNINTERRUPTED COMMUNICATION OF IMPORTANT APPLICATIONS.
- ACCORDING TO ACTUAL APPLICATION NEEDS, ROUTING ADDRESS MANAGEMENT, PORT MANAGEMENT, PORT FLOW CONTROL, VLAN DIVISION, IGMP, SECURITY POLICY AND OTHER APPLICATION SERVICE CONFIGURATIONS ARE PERFORMED THROUGH WEB, CLI, SNMP, TELNET AND OTHER NETWORK MANAGEMENT METHODS.
- THE SHELL IS MADE OF ALUMINUM ALLOY, WHICH HAS EXCELLENT INDUSTRIAL FIELD ENVIRONMENTAL ADAPTABILITY (INCLUDING MECHANICAL STABILITY, CLIMATE ENVIRONMENT ADAPTABILITY, ELECTROMAGNETIC ENVIRONMENT ADAPTABILITY, ETC.),
- PROTECTION LEVEL IS IP40, SUPPORT DUAL REDUNDANT POWER SUPPLY, LOW POWER CONSUMPTION AND NO FAN.
- IT IS SUITABLE FOR INDUSTRIAL SCENARIOS SUCH AS INTELLIGENT TRANSPORTATION, RAIL TRANSIT, ELECTRIC POWER INDUSTRY, MINING, PETROLEUM, SHIPPING, METALLURGY AND GREEN ENERGY CONSTRUCTION TO ESTABLISH A COST-EFFECTIVE, STABLE AND RELIABLE COMMUNICATION NETWORK.

FEATURES & BENEFITS

1. GIGABIT ACCESS, SFP FIBER PORT UPLINK INTEGRATED BYPASS FUNCTION

- SUPPORT NON-BLOCKING WIRE-SPEED FORWARDING.
- SUPPORT FULL-DUPLEX BASED ON IEEE802.3X AND HALF-DUPLEX BASED ON BACKPRESSURE.
- SUPPORT GIGABIT ETHERNET PORT AND GIGABIT SFP PORT COMBINATION, WHICH ENABLES USERS TO FLEXIBLY BUILD NETWORKING TO MEET THE NEEDS OF VARIOUS SCENARIOS.
- SUPPORT PHYSICAL SINGLE-MODE SINGLE FIBER OPTICAL PATH(BYPASS) FUNCTION, PURE HARDWARE SWITCHING, SHORT SWITCHING TIME, DOES NOT AFFECT THE DATA TRANSMISSION RATE AND IMPROVES THE STABILITY OF THE NETWORK SYSTEM.

2. NETWORK MANAGEMENT AND FAST RING FUNCTION

- STP/RSTP/MSTP/ERPS.
- STATIC AND DYNAMIC AGGREGATION.
- IEEE802.1Q VLAN, FLEXIBLE VLAN DIVISION, ACCESS, TRUNK AND HYBRID.
- QOS, PRIORITY MODE BASED ON 802.1P, PORT & DSCP, QUEUE SCHEDULING ALGORITHM INCLUDING EQU, SP, WRR & SP+WRR.
- IGMP SNOOPING V1/V2/V3 MEETS MULTI-TERMINAL HIGH-DEFINITION VIDEO SURVEILLANCE AND VIDEO CONFERENCE ACCESS REQUIREMENTS.
- ALC, FILTER DATA PACKET THROUGH CONFIGURING MATCHING RULES PROCESSING OPERATION & TIME PERMISSION, AND PROVIDE FLEXIBLE AND SAFE ACCESS CONTROL.

3. SECURITY

- 802.1X AUTHENTICATION.
- PORT ISOLATION, STORM CONTROL.
- IP-MAC-VLAN-PORT BINDING

4. STABLE AND RELIABLE

- CCC, CE, FCC, ROHS.
- LOW POWER CONSUMPTION, NO FAN, ALUMINUM SHELL.
- THE USER-FRIENDLY PANEL CAN SHOW THE DEVICE STATUS THROUGH THE LED INDICATOR OF PWR, SYS, LINK, L/A.

5. ONE-STOP REMOTE CONTROL AND MANAGEMENT

- HTTPS, SSLV3, AND SSHV1/V2.
- RMON, SYSTEM LOG, LLDP, AND PORT TRAFFIC STATISTICS.
- CPU MONITORING, MEMORY MONITORING, PING TEST, AND CABLE DIAGNOSE.
- WEB MANAGEMENT, CLI COMMAND LINE (CONSOLE, TELNET), SNMP (V1/V2/V3).

TECHNICAL SPECIFICATIONS

INTERFACE

Fixed Port	16 * 10/ 100/ 1000Base-T PoE ports 4 * 100/ 1000Base-X uplink SFP slot ports 1 * RS232 console port
Ethernet Ports	Port 1-16 support 10/ 100/ 1000Base-T auto-sensing, full/half duplex Auto MDI/MDI-X
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤ 100 meters) 100BASE-TX: Cat5 or later UTP (≤ 100 meters) 1000BASE-T: Cat5e or later UTP (≤ 100 meters)
SFP Slot Port	Gigabit SFP optical Fiber interface
Wavelength/Distance	Multimode: 850nm 0 to 550M, 1310nm 0 to 2KM Single mode: 1310nm 0 to 40KM , 1550nm to 120KM

HARDWARE FEATURES

Network Management Type	L2+	
Ring network	Supports ERPS ring network function, with a maximum number of rings of 5 and a convergence time of <20ms	
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX, IEEE802.3ab 1000Base-X, IEEE802.3z 1000Base-X, IEEE802.3x, IEEE802.3af/at	
Forwarding Mode	Store and Forward (Full Wire Speed)	
Switching Capacity	40Gbps	
Buffer Memory	29.7Mpps	
MAC	8K	
LED Indicator	Power Indicator Light	P: Green
	Fiber Indicator Light	F: Green (Link, SDFED)
	On the RJ45 seat	Yellow: Indicate PoE
		Green: Indicates network working status
Reset Switch	Yes, Press and hold the reset switch for 5s and release it to restore the factory settings	

SOFTWARE FEATURES

Port configuration	Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor. Traffic statistics
Link Aggregation	Static link aggregation LACP Algorithm based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunnelling Private VLAN (Protected port) GARP/GVRP

ACL	256ACLs L2, L3 e L4 Time-based ACL
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP) 802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN
QOS	port-based CoS 802.1p-based CoS DSCP-based. Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port
DHCP	SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload Dual Firmware LLDP
Security Features	Port Security MAC Address filter ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection DoS (Denial of Service) Classification of packages based on: End.MAC, IP End, TCP / UDP Ports, Protocol Type. 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection

Other Features

DNS Client DHCP
Relay DHCP Client
DHCP Snooping
DHCP Option 82
SNTP Client
UDLD

PoE management

Soft-Reboot PoE Non-stop Total PoE
Per port PoE function enable/disable PoE
classification detection
PD alive check
PoE schedule

Maintenance

Cable Diagnostics
Ping
SFP DDM (Digital Diagnostics Monitoring) Thermal
protection
System log (Local and Remote)
Memory and CPU Monitoring

APPROVALS AND STANDARDS TESTED FOR

IEC61000-4-2	ESD: ±8kV contact discharge, ±15kV air discharge
IEC61000-4-3	RS:10V/m (80~ 1000MHz)
IEC61000-4-4	EFT: power cable: ±4kV; data cable: ±2kV
IEC61000-4-5	Surge: power cable:CM±4kV/DM±2kV; data cable: ±4kV
IEC61000-4-6	radio frequency transmission:10V(150kHz~80MHz)
IEC61000-4-8	power frequency magnetic field:100A/m;1000A/m, 1s to 3s
IEC61000-4-9	pulsed magnet field:1000A/m
IEC61000-4- 10	damped oscillation:30A/m 1MHz
IEC61000-4- 12/ 18	shockwave: CM 2.5kV, DM 1kV
IEC61000-4- 16	common-mode transmission:30V; 300V, 1s
IEC61000-6-2	Common Industrial Standard
IEC60068-2-6	anti vibration
IEC60068-2-27	anti shock
IEC60068-2-32	free fall
CCC, CE mark, commercial, CE/LVD EN62368- 1, FCC Part 15 Class B, RoHS	Certifications
Lightning Protection	Lightning protection: 6KV 8/20us, Protection level: IP40

POWER

Power Supply	DC : 48V, Redundant
PoE wattage	240watt
PoE power supply method	Supports 1,2+, 3,6-power supply
PoE output power	IEEE802.3af/at with a maximum power of 30W per port and a total power of 240W

PHYSICAL CHARACTERISTICS

Dimension (L*W*H)	174mm* 148mm*68mm
Installation	Desktop, DIN rail

ENVIRONMENT

Working Temperature	-40°C to +75°C
Storage Temperature	-40°C to +85°C
Operating Humidity	5% to 95% (no condensation)

ORDERING CODE

DDPSMG 3016-4S CF

DDPSMG	Industrial Grade L2+ Giga Managed PoE Ethernet Switch
3016	16 * 10/100/1000M T PoE Port
4S	4 * 100/1000Base-X uplink SFP slot ports
CF	Fixed