D-Link®

Building Networks for People

DES-F3200 Series

Layer 2 Fast Ethernet Industrial Managed Switches

Features

Robust Design

- IP30-rated metal housing
- Fanless, passive cooling design
- High EMC endurance

Network Redundancy

- Ethernet Ring Protection Switching (ERPS)
- Dual power input for redundant power supplies

Switching Features

- IEEE 802.1Q and port-based VLAN
- IEEE 802.1p Quality of Service (QoS)
- STP/RSTP/MSTP
- Port mirroring
- Link aggregation
- Bandwidth control
- Broadcast storm control

Advanced Features

- IGMP/MLD Snooping
- L2 / L3 ACL

The DES-F3200 Series Layer 2 Fast Ethernet Industrial Managed Switches are equipped with 4/8/12/16 10/100 BASE-TX ports with or without PoE & up to 4 SFP ports. These switches feature a robust design making them ideal for deployment in industrial and outdoor surveillance settings, capable of withstanding the harshest environment. The DES-F3200 Series furthermore integrates advanced management and security functions to provide a complete solution.

Durable Design

The DES-F3200 Series switches are housed in a highly resistant IP30-rated metal casing to protect the switches from harsh environmental conditions. The high electromagnetic compatibility (EMC) protects the DES-F3200 Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of DES-F3200 Series while also being able to operate in a wider temperature range of up to 70 ℃ For increased flexibility, the DES-F3200 Series can also be mounted on a DIN rail or wall mounted.

High Redundancy and Reliability

The DES-F3200 Series support ERPS <50 ms quick failover recovery for ring topologies that ensures minimal downtime and avoids any loss of data in mission-critical deployment environments. Meanwhile, the dual power input allows for a redundant power supply to make sure the network continues to operate in the event of a primary power supply failure.

Advanced Features

The DES-F3200 Series is equipped with advanced security features such as Static MAC, Storm Control, and IGMP Snooping. Static MAC allows users to create a MAC whitelist for specific ports, helping administrators limit network access to authorized devices only. Storm Control monitors broadcast, multicast, or unknown unicast traffic and will start blocking or discarding packets which could flood the network when the defined threshold is exceeded. IGMP Snooping can reduce the load of L3 multicast routers and save bandwidth in network throughput.

Easy Troubleshooting

The DES-F3200 Series features loopback detection and cable diagnostics to help network administrators find and solve network problems quickly and easily. Loopback detection is used to detect loops created by a specific port and automatically shuts down the affected port. Cable diagnostics helps network administrators quickly examine the quality of the copper cables, recognize the cable type, and detect cable errors.

Power over Ethernet Support

The DES-F3200 series switches are PoE-ready switches (PoE models only) & can provide total PoE budget up to 240W, capable of supplying up to 30 W of power per port to connected PoE-enabled devices. This effectively reduces deployment times, reduces cable clutter, and eliminates the need for dedicated power supplies to allow PoE-devices to be installed in remote locations.

Technical Specifications				
Model Number	DES-F3200-06PI	DES-F3200-12CI	DES-F3200-08PCI	DES-F3200-16CI
General				
Interfaces	4 10/100 Base-Tx PoE / PoE+ Ports & 2 100/1000 Base-X SFP	4 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports	4 10/100 Base-Tx Ports PoE / PoE+ & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports	8 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports
Other Interfaces	1 x RS-232 Console Port (RJ-45) 2 relay outputs with current carrying capacity of 1A @ 30 VDC			
Media Interface Exchange	MDI/MDIX adjustment for all twisted-pair ports			
Other Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) • IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted- pair copper) • IEEE 802.3az compliance • Auto-negotiation • IEEE 802.3x Flow Control • IEEE 802.3z			
Duplex Mode	• Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps			
Performance				
Switching Capacity	4.8 Gbps		8.8 Gbps	9.6 Gbps
MAC Address table	16K			
Transmission Method	• Store-and-forward			
Packet Buffer Size	1.5MB			
Physical / Environmental				
Diagnostic LED	PWR1, PWR2, Alarm, Run, Ring, Ring Master, Link/Speed, PoE Status			
Weight	Max. 1.2 Kg.			
Dimension (W x H x D)	60.3mm x 137.9mm x 164mm (W x D x H)			
Operating Temperature	-20°C~70°C (-4°F~158°F)			
Storage Temperature	-40°C~85°C (-40°F~185°F)			
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)			
Housing	IP30-rated metal casing			
installation	DIN rail / wall mountable			
Power Requirements				
Power Input	51-57 VDC Dual redundant inputs for 802.3at mode	9-48 VDC or 18~30VAC	51-57 VDC Dual redundant inputs for 802.3at mode	9-48 VDC or 18~30VAC
Input Current	Max. 3.2A @ 45VDC (Max. 8 ports at 15.4W per PoE port) Max. 5.5A @ 51VDC (Max. 8 ports at 30W per PoE port)	Max. 1.5A @ 18VAC Max. 2.0A @ 9VDC		Max. 1.5A @ 18VAC Max. 2.0A @ 9VDC
Reverse Polarity Protection	Yes			

Model Number	DES-F3200-12PCI	DES-F3200-12P8CI	DES-F3200-24CI	DES-F3200-20PCI	DES-F3200-20P8CI
General					
Interfaces	4 10/100 Base-Tx PoE / PoE+ Ports, 4 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports	8 10/100 Base-Tx PoE / PoE+ Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports	16 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports	4 10/100 Base-Tx PoE / PoE+ Ports, 12 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports	8 10/100 Base-Tx PoE / PoE+ Ports, 8 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports
Other Interfaces	1 x RS-232 Console Port (RJ-45) 2 relay outputs with current carrying capacity of 1A @ 30 VDC				
Media Interface Exchange	Auto MDI/MDIX adjustment for all twisted-pair ports				
Other Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) • IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted- pair copper) • IEEE 802.3az compliance • Auto-negotiation • IEEE 802.3x Flow Control • IEEE 802.3z				
Duplex Mode	• Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps				
Performance					
Switching Capacity	9.6 Gbps		11.2 Gbps		
MAC Address table	16K				
Transmission Method	• Store-and-forward				
Packet Buffer Size	1.5MB				
Physical / Environmental					
Diagnostic LED	PWR1, PWR2, Alarm, Run, Ring, Ring Master, Link/Speed, PoE Status				
Weight	Max. 1.2 Kg.		Max. 1.4 Kg.		
Dimension (W x H x D)	60.3mm x 137.9mm x 164mm (W x D x H)		78mm x 137.9mm x 164mm (W x D x H)		
Operating Temperature	-20°C~70°C (-4°F~158°F)				
Storage Temperature	-40°C~85°C (-40°F~185°F)				
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)				
Housing	IP30-rated metal casing				
installation	DIN rail / wall mountable				
Power Requirements					
Power Input	51-57 VDC Dual redundant inputs for 802.3at mode		9-48 VDC or 18~30VAC	51-57 VDC Dual redundant inputs for 802.3at mode	
Input Current	Max. 3.2A @ 45VDC (Max. 8 ports at 15.4W per PoE port) Max. 5.5A @ 51VDC (Max. 8 ports at 30W per PoE port)		Max. 1.5A @ 18VAC Max. 2.0A @ 9VDC	Max. 3.2A @ 45VDC (Max. 8 ports at 15.4W per PoE port) Max. 5.5A @ 51VDC (Max. 8 ports at 30W per PoE port)	
Reverse Polarity Protection	Yes				

Software Features	
Protocol Support	IPv4 / IPv6, IGMP v1/v2, MLD v2, DHCP Server / Client / Relay, GARP, GVRP, NTP, SNTP, IEEE1588 PTP v2, 802.1x, EAP, TACACS+, SMTP, SNMP v1/v2/v3, RMON, TFTP, ICMP, Telnet, Syslog, LLDP, LACP, Pingv6.
VLAN	802.1Q VLAN (256 Active VLAN) Port Based VLAN Protocol based VLAN IP Subnet Based VLAN MAC Based VLAN
QoS	802.1p 8 Priority Queues Queue Handling: Strict, Weighted Round Robin, Deficit Weighted Round Robin.
Security	802.1x, TACACS+, Layer 2 & Layer 3 ACL

Standards / Certifications / Compliance	
Safety	UL60950-1 2nd Ed. /CSA C22.2 No.60950-1-07 2nd Ed. / EN60950-1 / CB
EMC	FCC Part 15, Subpart B, Class A / EN 61000-6-4:2007+A1:2011 / EN 61000-6-2:2005
EMS	IEC 61000-4-2 ESD IEC 61000-4-3 RS IEC 61000-4-4 EFT IEC 61000-4-5 Surge IEC 61000-4-6 CS IEC 61000-4-8 PFMF IEC 61000-4-11 DIP
Shock	IEC 60068-2-27
Vibration	IEC 60068-2-64
Freefall	IEC 60068-2-32
Environmental	ROHS
MTBF	TBD

Ordering Information	
Part Code	Description
DES-F3200-06PI	Layer 2 Fast Ethernet Industrial Managed switch with 4 10/100 Base-Tx PoE / PoE+ Ports & 2 100/1000 Base-X SFP Ports. -20°C~70°C operating temperature.
DES-F3200-12CI	Layer 2 Fast Ethernet Industrial Managed switch with 4 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-08PCI	Layer 2 Fast Ethernet Industrial Managed switch with 4 10/100 Base-Tx Ports PoE / PoE+ & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-16CI	Layer 2 Fast Ethernet Industrial Managed switch with 8 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-12PCI	Layer 2 Fast Ethernet Industrial Managed switch with 4 10/100 Base-Tx PoE / PoE+ Ports, 4 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-12P8CI	Layer 2 Fast Ethernet Industrial Managed switch with 8 10/100 Base-Tx PoE / PoE+ Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-24CI	Layer 2 Fast Ethernet Industrial Managed switch with 16 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-20PCI	Layer 2 Fast Ethernet Industrial Managed switch with 4 10/100 Base-Tx PoE / PoE+ Ports, 12 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.
DES-F3200-20P8CI	Layer 2 Fast Ethernet Industrial Managed switch with 8 10/100 Base-Tx PoE / PoE+ Ports, 8 10/100 Base-Tx Ports & 4 10/100/1000 Base-T or 100/1000 Base-X SFP COMBO Ports. -20°C~70°C operating temperature.

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