The DES-3800 series is a member of the D-Link xStack family of next generation switches that deliver performance, flexible expansion, robust security, multi-layer Quality of Service (QoS), Power Over Ethernet and redundant power option. The DES-3800 series forms a cost-effective Ethernet virtual stack for workgroup connection. It incorporates L3 packet routing and many functions typically found in a chassis-based solution. The DES-3800 series provides the state-of-the-art Single IP Management for seamless integration with a core Gigabit xStack attached to an optional ultra high-speed 10Gigabit backbone.

**L3 Virtual Stack.** Simple to deploy and easy to manage, the DES-3800 series comprises the departmental access-level devices that can be easily stacked and configured with any switches supporting D-Link's Single IP Management, including the D-Link xStack core switches, to form part of a multi-level network structured with backbone and centralized high-speed servers. Without any stacking cable, cable distance barrier and physical stacking method limitations, a DES-3800 stack can comprise units that are located anywhere on the same network domain, eliminating the possibility of any single point of failure. Ideal for deployment at the network edge, the DES-3800 blends L2 packet switching with dynamic L3 IP routing to relieve the network backbone and servers of any unnecessary traffic.

**Comprehensive Security:** The DES-3800 series provides a complete set of security features for connectivity and access control. This set includes L2/L3/L4 Access Control Lists (ACLs) based on MAC address, switch port, IP address, and/or TCP/UDP port numbers, ARP storm control and MAC address control. The DES-3800 also provides central management for administration access via TACACS+ and RADIUS. Together with network application control, this security ensures that not only proper user access is served, but malicious traffic is also prevented from being spread across the network.

**Enhanced Network Performance & Availability:** The DES-3800 series provides extensive VLAN support including 4K VLAN entries, GARP/GVRP and 802.1Q to enhance network security and performance. Bandwidth control allows you to set traffic limit for each port to control the traffic volume from the edge of the network. DES-3828 and 3828P support redundant power option to maximize network uptime. Other features include 802.3ad Link Aggregation, 802.1d Spanning Tree and 802.1w Rapid Spanning Tree to increase network reliability and availability of your Virtual Stack.

**Multi-layer Quality of Service (QoS).** The DES-3800 series implements a robust set of multi-layer (L2, L3, L4) QoS/CoS features to ensure that critical network services like VoIP, ERP, Intranet and video conference are served with proper priority. 8 priority queues for 802.1p/TOS/802.1p are supported, with classification and marking based on MAC SA/DA, IP SA/DA, DSCP, and/or TCP/UDP port numbers. With IP Multicast support, the DES-3800 is also ideal for high-bandwidth applications, such as MPEG video, delivering traffic to multiple receivers without adding any additional burden on the source or the receivers while using the least network bandwidth.
## Technical Specifications

<table>
<thead>
<tr>
<th></th>
<th>DES-3828</th>
<th>DES-3828DC</th>
<th>DES-3828P</th>
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</thead>
<tbody>
<tr>
<td><strong>Interface</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/100BASE-TX Ports</td>
<td>24</td>
<td>24</td>
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<tr>
<td>10/100/1000BASE-T Ports</td>
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<td>Combo 10/100/1000BASE-T Ports/SFP Slots</td>
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<td>Internal Power Supply</td>
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</tr>
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<tr>
<td>Power Output</td>
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<tr>
<td>Power Consumption</td>
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<tr>
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<td>802.3af Power Over Ethernet</td>
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<td>Number of PoE Capable Ports</td>
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<tr>
<td>PoE Auto-Discovery</td>
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<td>PoE Auto-Disable (Per Port)</td>
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<tr>
<td>PoE Active Circuit Protection</td>
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<td><strong>Performance</strong></td>
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<td>Switching Capacity</td>
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</tr>
<tr>
<td>64-Byte System Packet Forwarding Rate</td>
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<td>IP Address Table</td>
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<td>MAC Address Table</td>
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<td>Max. Jumbo Frame Size</td>
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<td><strong>Diagnostic LED</strong></td>
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<td>Power, Console, RPS (Per Device)</td>
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<td>441 x 310 x 44 mm</td>
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<td>4.24 kg (9.35 lbs)</td>
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<td>Operating Temperature</td>
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<tr>
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<td>EMI</td>
<td>FCC Class A, CE, C-Tick</td>
<td>FCC Class A, CE, C-Tick</td>
<td>FCC Class A, CE, C-Tick</td>
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<tr>
<td>MTBF</td>
<td>123,027 Hours</td>
<td>133,105 Hours</td>
<td>168,110 Hours</td>
</tr>
</tbody>
</table>
Software Features

L2 Features
- IGMP Snooping: Supports 256 Multicast Groups
- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree
- 802.1s Multiple STP
- 802.3ad Link Aggregation: 32 Groups, 8 Ports Per Group
- One-to-One/Many-to-One Port Mirroring

VLAN
- 802.1Q
- Maximum VLAN Groups: VLAN 4K (4K Static VLANs, 255 Dynamic VLANs)

L3 Features
- Static Routing: 128 Routers
- RIP v1/v.2
- OSPF
- IPv4 Hardware Routing Table: 2K
- L3 Hardware Forwarding Table: 4K
- 802.1Q
- Priority-based Queuing
- 802.1x Port-Based Access Control
- 802.1Q MAC-Based Access Control
- 802.1Q VLAN Groups

Access Control List (ACL)
- 800 Rules Per Device
- Based on Port
- Based on MAC Address
- Based on 802.1p Priority Queues
- Based on VLAN
- Based on DSFP
- Based on IP Address
- Based on Protocol Type
- Based on TCP/UDP Port
- Based on TCP/UDP Payload (Packet Content)

Security
- RADIUS Authentication for Management Access
- TACACS+ Authentication for Management Access
- SSH v.2
- SSL v.2
- Port Security: 16 MAC Addresses Per Port
- 802.1x Port-Based Access Control
- 802.1x MAC-Based Access Control
- Traffic Segmentation
- IP-MAC Binding: 500 entries Per Device

Software Features

Multicast
- IGMP v.1
- IGMP v.2
- DVMRP
- PIM
- DM
- PIM DM

QoS
- Bandwidth Control: Per-Port Granularity 64K/s
- Broadcast Storm Control
- 802.1p Priority Queues
- Number of Queues Per Port: 8
- CoS Based on Port
- CoS Based on MAC Destination and Source Addresses
- CoS Based on TOS
- CoS Based on DSFP
- CoS Based on IP Destination and Source Addresses
- CoS Based on TCP/UDP Port

Management
- Single IP Management v1.5
- Web-Based GUI
- CLI
- Telnet Server
- SNMP v.1
- SNMP v.2c
- SNMP v.3
- SNMP Trap on MAC Notification
- RMON v.1-4 Groups (Statistics, History, Alarms, Events)
- RMON MIB
- DHCP/DHCP Client
- DHCP Relay Option 82
- SYSLOG
- Dual Image

Access Control List (ACL)
- 800 Rules Per Device
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- 802.1x MAC-Based Access Control
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Management Software
- D-View 5.1 SNMP Network Management Program

SFP Transceivers
- DEM-310GT: SFP transceiver for 1000BASE-LX, single-mode fiber, max. Distance 10 km, 3.3V
- DEM-311GT: SFP transceiver for 1000BASE-SX, multi-mode fiber, max. Distance 550m, 3.3V
- DEM-310GT2: SFP transceiver for 1000BASE-SX, multi-mode fiber, max. Distance 2 km, 3.3V
- DEM-314GT: SFP transceiver for 1000BASE-LX, single-mode fiber, max. Distance 50 km, 3.3V
- DEM-315GT: SFP transceiver for 1000BASE-LX, single-mode fiber, max. Distance 80 km, 3.3V

Redundant Power Supply
- DPS-200: 60-watt redundant power supply
- DPS-600: 500-watt redundant power supply
- DPS-800: 2-slot redundant power supply chassis
- DPS-900: 8-slot redundant power supply chassis

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Specifications subject to change without prior notice.

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