

## Product Highlights

### Designed for Surveillance

The switches feature two modes: Standard Mode and Surveillance Mode, allowing the user to choose the interface most suitable for their needs

### Surge Protection

6 kV surge protection on PoE ports shields the switch from power surges and lightning strikes to maximize network availability

### Easy Management

A surveillance overview, DIP switch, ONVIF device support and video traffic optimization simplify the process of managing a surveillance network



## DSS-200G Series

# Gigabit Ethernet PoE Switches

## Features

### Physical

- High PoE budgets and support for IEEE 802.3bt 90 W PoE (DSS-200G-MPP Series)
- 6 kV surge protection on all PoE ports
- Fiber uplink ports for connection to a NVR or CMS center
- Alarm Port and four-stage PoE usage indicator light

### Surveillance Network

- Fanless (DSS-200G-10MP)
- Easy deployment with automatic configuration
- Surveillance traffic optimization
- Auto-detect ONVIF devices
- Intuitive interface for monitoring and management
- Descriptive health diagnostics
- Surveillance VLAN

### Management Features

- Client-based utility or web-based GUI
- Built-in SNMP MIB
- Status Dashboard
- Working Mode (DIP Switch)
  - QoS
  - Extend up to 250 Meters<sup>1</sup>
  - Isolate
  - PD-Alive
  - STP (Spanning Tree Protocol)

The DSS-200G Series is a range of switches designed to meet the surveillance requirements of small, medium, and enterprise businesses. Support for high-powered Pan Tilt Zoom (PTZ) cameras, automatic Surveillance VLAN, and 6 kV surge protection make the DSS-200G Series ideal for IP surveillance deployments. A redesigned interface, a range of diagnostic and troubleshooting tools, and energy efficient technologies provide a flexible solution to your surveillance requirements.

## Easy to Deploy

An interactive setup wizard removes the complexity from installing the switch for the first time. It allows you to choose the web interface mode (Standard or Surveillance), the IP address allocation method (static or DHCP), and the administrator user name and password. This completes the initial setup of the switch and automatically configures features such as Loop Detection, SNMP and Surveillance VLAN. An informative quick start guide shows you how to use the network diagram, and a network overview is displayed on the next page. D-Link and 3<sup>rd</sup> party devices are automatically detected and shown on the network overview page for easy administration.

## Surveillance Traffic Optimization

The DSS-200G Series supports the automatic Surveillance VLAN feature. This automatically detects surveillance devices and puts them into the Surveillance VLAN, segmenting their traffic from the rest of the network. The feature enhances the security of the data and gives the traffic a higher priority through the switch, reducing the chances of the video freezing or being delayed on live streams. A single switch can be used for both surveillance and data networks, removing the need for dedicated surveillance hardware and reducing maintenance costs.

## Intuitive Web Interface

A redesigned Surveillance interface makes surveillance features more accessible than ever. The choice between Standard and Surveillance modes can be made during switch setup, allowing the user to choose the interface that best suits their requirements. A network overview shows which devices are connected to which ports, and ONVIF device support allows the switch to recognize both D-Link and third party IP cameras and Network Video Recorders (NVRs). With monitoring, management, and troubleshooting tools built into a single interface, the DSS-200G Series provides everything you need to manage your surveillance network.

# DSS-200G Series Gigabit Ethernet PoE Switches

## Easy Troubleshooting

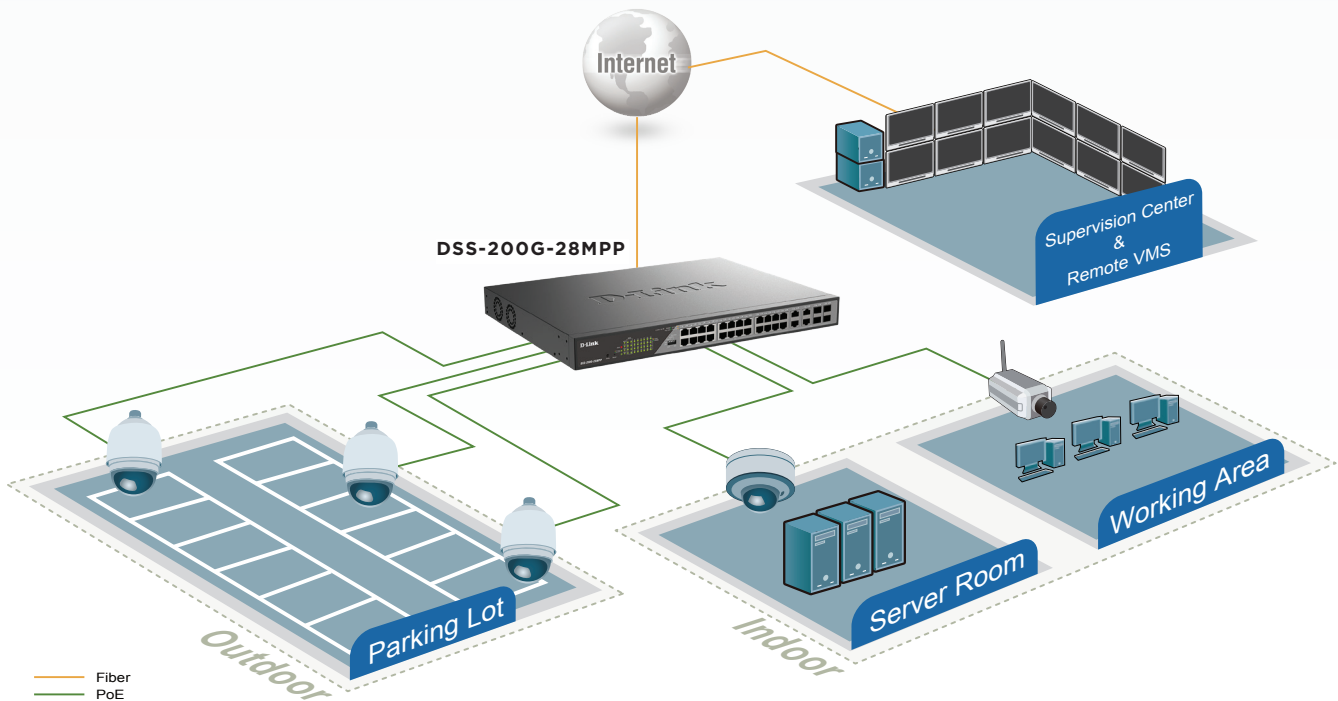
The DSS-200G Series features Loopback Detection and Cable Diagnostics to help network administrators find and solve network problems quickly and easily. Loopback Detection detects loops in the network, where multiple devices have been connected to each other and create a forwarding loop. The switch will identify the port causing the loop and shut the affected port down to avoid network instability. Cable Diagnostics can be used to remotely test the quality of copper cables, recognize the cable type, and detect cable errors.

## PoE Support

The DSS-200G Series provides support for Power over Ethernet (PoE), reducing deployment time for IP cameras, VoIP phones, and access points. The DSS-200G-10MPP and DSS-200G-28MPP support IEEE 802.3bt, providing up to 90 watts on selected ports for the latest high-powered Pan Tilt Zoom (PTZ) cameras. All switches in the DSS-200G Series support IEEE 802.3af and 802.3at, providing up to 30 watts per port. This, combined with high power budgets, ensures all of your critical surveillance infrastructure can be powered from a single switch.

## DIP Switches for Easy Configuration

The DIP switches allow administrators to quickly deploy the switch for various application scenarios without having to apply the settings via the Web GUI. For example, the Extend setting on the DIP switch activates long-distance transmissions for connections up to 250 meters. The DIP switches are also easy access for personnel without IT knowledge to quickly adjust application settings.



Example Surveillance Topology

# DSS-200G Series Gigabit Ethernet PoE Switches

## Surveillance Topology Web Interface Screenshot

**Surveillance Overview**

Surveillance Topology | Device Information

IP Camera x 12 | NVR x 2 | ! x 1 | Other x 3

**Port 7**  
 IP: 10.90.90.7  
 Model: DCS-2136L  
 Power Consumption: 3.0 W

D-Link  
DSS-200G-28MPP

Note: System probes IP-Camera every 30s.

## Device Information Web Interface Screenshot

**Surveillance Overview**

Surveillance Topology | Device Information

SWITCH | WEB | INFO

|                  |                |             |                   |                   |                                    |
|------------------|----------------|-------------|-------------------|-------------------|------------------------------------|
| Device Type      | DSS-200G-28MPP | IP Address  | 10.90.90.90       | Boot PROM Version | Ver 1.00.002                       |
| System Name      | D-Link         | Mask        | 255.0.0.0         | Firmware Version  | Ver 2.00.05                        |
| Hardware Version | C1             | Gateway     | 10.90.90.254      | System Time       | 1/1/2000 00:06:11                  |
| Serial Number    | T51O19000012   | MAC Address | 00-AD-24-18-F4-3B | Using Time        | 0 days0 hours 6 minutes 11 seconds |

**PoE Utilization**

MAX 518W | 40%

**Bandwidth Utilization** | 1000 Mbps | 50 Mbps

Total Bandwidth | 190 Mbps

Note: System probes IP-Camera every 30s.

# DSS-200G Series Gigabit Ethernet PoE Switches

| Technical Specifications     |   |  |  |  |
|------------------------------|---|--|--|--|
| General                      | DSS-200G-10MP   | DSS-200G-10MPP   | DSS-200G-28MP  | DSS-200G-28MPP   |
| Hardware Version             | A1  |  |  |  |
| Size                         | <ul style="list-style-type: none"> <li>• 11-inch desktop size<sup>2</sup></li> <li>• 1U height</li> </ul>   | <ul style="list-style-type: none"> <li>• 11-inch desktop size<sup>2</sup></li> <li>• 1U height</li> </ul>        | <ul style="list-style-type: none"> <li>• 19-inch rackmount size</li> <li>• 1U height</li> </ul>              | <ul style="list-style-type: none"> <li>• 19-inch rackmount size</li> <li>• 1U height</li> </ul>  |
| Number of Ports              | <ul style="list-style-type: none"> <li>• 8 x 10/100/1000 Mbps PoE</li> <li>• 2 x SFP 1000 Mbps</li> </ul>   | <ul style="list-style-type: none"> <li>• 8 x 10/100/1000 Mbps PoE</li> <li>• 2 x SFP 1000 Mbps</li> </ul>        | <ul style="list-style-type: none"> <li>• 24 x 10/100/1000 Mbps PoE</li> <li>• 4 x Combo 1000 Mbps</li> </ul> | <ul style="list-style-type: none"> <li>• 24 x 10/100/1000 Mbps PoE</li> <li>• 4 x Combo 1000 Mbps</li> </ul>   |
| Port Functions               | <ul style="list-style-type: none"> <li>• IEEE 802.3 compliant</li> <li>• IEEE 802.3u compliant</li> <li>• IEEE 802.3ab compliant</li> <li>• IEEE 802.3af/802.3at compliant</li> <li>• IEEE 802.3bt (DSS-200G-10MPP/28MPP only)</li> <li>• IEEE 802.3x Flow Control supports full-duplex mode</li> <li>• Supports manual/auto MDI/MDIX configuration</li> <li>• Auto-negotiation</li> <li>• Supports half/full-duplex operation</li> <li>• IEEE 802.3az compliant</li> </ul> |  |  |  |
| Performance                  |   |  |  |  |
| Switching Capacity           | 20 Gbps   |  | 56 Gbps  |  |
| Maximum Forwarding Rate      | 14.88 Mpps  |  | 41.67 Mpps   |  |
| MAC Address Table Size       | 8K Entries  |  |  |  |
| Packet Buffer                | 4.1 Mbits   |  |  |  |
| CPU Memory                   | DDR3 128 MB   |  |  |  |
| Flash Memory                 | 32 MB   |  |  |  |
| LEDs                         |   |  |  |  |
| Power (per device)           | ✓   |  |  |  |
| Link/Active/Speed (per port) | ✓   |  |  |  |
| Alarm                        | ✓   |  |  |  |
| PoE Budget Usage             | 25%, 50%, 75%, 100% (LED * 4)   |  |  |  |
| PoE                          |   |  |  |  |
| PoE Standard                 | <ul style="list-style-type: none"> <li>• IEEE 802.3af</li> <li>• IEEE 802.3at</li> </ul>  | <ul style="list-style-type: none"> <li>• IEEE 802.3af</li> <li>• IEEE 802.3at</li> <li>• IEEE 802.3bt</li> </ul> | <ul style="list-style-type: none"> <li>• IEEE 802.3af</li> <li>• IEEE 802.3at</li> </ul>                     | <ul style="list-style-type: none"> <li>• IEEE 802.3af</li> <li>• IEEE 802.3at</li> <li>• IEEE 802.3bt</li> </ul>   |
| PoE Capable Ports            | Ports 1 to 8  |  | Ports 1 to 24  |  |
| PoE Power Budget             | <ul style="list-style-type: none"> <li>• 130 W</li> <li>• 30 W max. per PoE port</li> </ul>   | <ul style="list-style-type: none"> <li>• 242 W</li> <li>• 90 W max. per PoE port for ports 1 to 8</li> </ul>     | <ul style="list-style-type: none"> <li>• 370 W</li> <li>• 30 W max. per PoE port</li> </ul>                  | <ul style="list-style-type: none"> <li>• 518 W</li> <li>• 90 W max. per PoE port for ports 1 to 8</li> <li>• 30 W max. per PoE port for ports 9 to 24</li> </ul> |
| Power Consumption            |   |  |  |  |
| Standby Mode                 | 10.4 W  | 10.7 W   | 15.12 W  | 15.19 W  |
| Maximum Power Consumption    | <ul style="list-style-type: none"> <li>• 160.2 W (PoE on)</li> <li>• 9.63 W (PoE off)</li> </ul>  | <ul style="list-style-type: none"> <li>• 267.5 W (PoE on)</li> <li>• 15.4 W (PoE off)</li> </ul>                 | <ul style="list-style-type: none"> <li>• 425.9 W (PoE on)</li> <li>• 25.5 W (PoE off)</li> </ul>             | <ul style="list-style-type: none"> <li>• 579.3 W (PoE on)</li> <li>• 23.52 W (PoE off)</li> </ul>  |
| Physical                     |   |  |  |  |
| Power Input                  | <ul style="list-style-type: none"> <li>• 100 to 240 V AC</li> <li>• 50 to 60 Hz internal power supply</li> </ul>  |  |  |  |
| MTBF                         | 345,045 hours   | 508,112 hours  | 331,732 hours  | 289,075 hours  |

# DSS-200G Series Gigabit Ethernet PoE Switches

|                       |   |   |   |  |
|-----------------------|---|---|---|--|
| Acoustics             | 0 dB(A)                                       | 50.6 dB(A)                                    | 53 dB(A)                                      | 55 dB(A)                                       |
| Heat Dissipation      | 103.05 BTU/hr                                 | 87.00 BTU/hr                                  | 190.74 BTU/hr                                 | 209.16 BTU/hr                                  |
| Weight                | 1.55 kg (4.42 lbs)                            | 2.05 kg (4.52 lbs)                            | 2.86 kg (6.30 lbs)                            | 4.71 kg (10.38 lbs)                            |
| Dimensions            | 280 x 180 x 44 mm<br>(11.02 x 7.08 x 1.73 in) | 280 x 230 x 44 mm<br>(11.02 x 9.05 x 1.73 in) | 440 x 208 x 44 mm<br>(17.32 x 8.18 x 1.73 in) | 440 x 330 x 44 mm<br>(17.32 x 12.99 x 1.73 in) |
| Fans                  | N/A (Fanless)                                 | 1   | 2   |  |
| Operating Temperature | -5 to 50° C (23 to 122° F)                    |   |   |  |
| Storage Temperature   | -40 to 70° C (-40 to 158° F)                  |   |   |  |
| Operating Humidity    | 0% to 95% non-condensing                      |   |   |  |
| Storage Humidity      | 0% to 95% non-condensing                      |   |   |  |
| EMI                   | FCC/IC, CE, BSMI                              |   |   |  |
| Safety                | cUL, UL, LVD, CB, BSMI                        |   |   |  |

## Working Modes (DIP Switch)

|                                      |                                      |                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| QoS (Port Priority)                  | Ports 1-8                            | Ports 1-8                            | Ports 1-24                           | Ports 1-24                           |
| Extend (Up to 250M @ 10 Mbps)        | DIP: Ports 1-4<br>Web GUI: Ports 1-4 | DIP: Ports 1-4<br>Web GUI: Ports 1-8 | DIP: Ports 1-8<br>Web GUI: Ports 1-8 | DIP: Ports 1-8<br>Web GUI: Ports 1-8 |
| Isolate (Traffic Isolation per Port) | Ports 1-8                            | Ports 1-8                            | Ports 1-24                           | Ports 1-24                           |
| PD-Alive                             | Ports 1-8                            | Ports 1-8                            | Ports 1-24                           | Ports 1-24                           |
| STP                                  | Ports 7-8                            | Ports 7-8                            | Ports 25-28                          | Ports 25-28                          |

## Software Features

|                          |  |   |
|--------------------------|--|---|
| VLAN                     | <ul style="list-style-type: none"> <li>Port-based VLAN</li> <li>802.1Q Tagged VLAN</li> <li>Auto Surveillance VLAN</li> <li>Voice VLAN</li> <li>Management VLAN</li> </ul>   | <ul style="list-style-type: none"> <li>Asymmetric VLAN</li> <li>VLAN Group <ul style="list-style-type: none"> <li>Supports 128 static VLAN groups</li> <li>Max. 4094 VIDs</li> </ul> </li> </ul>  |
| L2 Features              | <ul style="list-style-type: none"> <li>Flow Control <ul style="list-style-type: none"> <li>802.3x Flow Control</li> </ul> </li> <li>Jumbo Frames up to 10,240 Bytes</li> <li>IGMP Snooping <ul style="list-style-type: none"> <li>IGMP v1/v2 Snooping</li> <li>Supports 64 Groups</li> <li>IGMP Snooping Querier</li> </ul> </li> <li>802.3ad Link Aggregation: <ul style="list-style-type: none"> <li>DSS-200G-10MP: Supports 8 groups per device and 8 ports per group</li> <li>DSS-200G-28MP: Supports 8 groups per device and 8 ports per group</li> <li>DSS-200G-10MPP: Supports 8 groups per device and 8 ports per group</li> <li>DSS-200G-28MPP: Supports 8 groups per device and 8 ports per group</li> </ul> </li> <li>Ethernet Ring Protection Switching</li> <li>Loopback Detection</li> </ul> | <ul style="list-style-type: none"> <li>Cable Diagnostics</li> <li>LLDP</li> <li>Port Mirroring <ul style="list-style-type: none"> <li>One-to-One</li> <li>Many-to-One</li> </ul> </li> <li>Statistics <ul style="list-style-type: none"> <li>Tx Ok</li> <li>Tx Error</li> <li>Rx Ok</li> <li>Rx Error</li> </ul> </li> <li>Spanning Tree Protocol <ul style="list-style-type: none"> <li>802.1D STP</li> <li>802.1w RSTP</li> </ul> </li> </ul> |
| Quality of Service (QoS) | <ul style="list-style-type: none"> <li>802.1p Quality of Service</li> <li>4 queues per port</li> <li>Queue Handling <ul style="list-style-type: none"> <li>Strict</li> <li>Weighted Round Robin (WRR)</li> </ul> </li> </ul>   | <ul style="list-style-type: none"> <li>Port-based Bandwidth Control (Rate Limiting) <ul style="list-style-type: none"> <li>Ingress : 16 Kbps, Egress : 16 Kbps</li> </ul> </li> </ul>   |
| Security                 | <ul style="list-style-type: none"> <li>D-Link Safeguard</li> <li>Traffic Segmentation</li> <li>Broadcast/Multicast/Unknown Unicast Storm Control</li> </ul>  | <ul style="list-style-type: none"> <li>DoS Attack Prevention</li> <li>SSL</li> </ul>  |
| Management               | Web-based GUI (Supports IPv4/IPv6)   |   |

# DSS-200G Series Gigabit Ethernet PoE Switches

|                   |   |   |
|-------------------|---|---|
| Green Technology  | <ul style="list-style-type: none"> <li>• Power Saving by <ul style="list-style-type: none"> <li>• Link Status</li> <li>• LED Shut-Off</li> <li>• Port Shut-Off</li> <li>• System Hibernation</li> </ul> </li> </ul>   | <ul style="list-style-type: none"> <li>• Compliant with IEEE 802.3az Energy-Efficient Ethernet</li> <li>• Time-based PoE</li> </ul>   |
| MIB/RFC Standards | <ul style="list-style-type: none"> <li>• RFC768 UDP</li> <li>• RFC791 IP</li> <li>• RFC792 ICMP</li> <li>• RFC793 TCP</li> <li>• RFC826 ARP</li> <li>• RFC1213 MIB II</li> <li>• RFC1493 Bridage MIB</li> <li>• RFC1907 SNMPv2 MIB</li> <li>• RFC1215 MIB Traps Convention</li> </ul> | <ul style="list-style-type: none"> <li>• RFC2233 Interface Group MIB</li> <li>• RFC2665 Ether-like MIB</li> <li>• RFC4363 IEEE 802.1p MIB</li> <li>• ZoneDefense MIB</li> <li>• Private MIB</li> <li>• RFC951 BootP client</li> <li>• RFC1542 BootP/DHCP client</li> <li>• RFC2236 IGMP Snooping</li> </ul> |

| Order Information         |   |
|---------------------------|---|
| Part Number               | Description   |
| DSS-200G-10MP             | 8 Port 10/100/1000 Mbps + 2 Port SFP 1000 Mbps PoE switch         |
| DSS-200G-28MP             | 24 Port 10/100/1000 Mbps + 4 Port Combo 1000BASE-T/SFP PoE switch |
| DSS-200G-10MPP            | 8 Port 10/100/1000 Mbps + 2 Port SFP 1000 Mbps PoE switch         |
| DSS-200G-28MPP            | 24 Port 10/100/1000 Mbps + 4 Port Combo 1000BASE-T/SFP PoE switch |
| Optional SFP Transceivers |   |
| DEM-310GT                 | 1000BASE-LX, single-mode, 10 km                                   |
| DEM-311GT                 | 1000BASE-SX, multi-mode, 550 m                                    |
| DEM-312GT2                | 1000BASE-SX, multi-mode, 2 km                                     |
| DEM-314GT                 | 1000BASE-LHX, single-mode, 50 km                                  |
| DEM-315GT                 | 1000BASE-ZX, single-mode, 80 km                                   |
| DEM-330T                  | 1000BASE-BX-D, single-mode, 10 km                                 |
| DEM-330R                  | 1000BASE-BX-U, single-mode, 10 km                                 |
| DEM-331T                  | 1000BASE-BX-D, single-mode, 40 km                                 |
| DEM-331R                  | 1000BASE-BX-U, single-mode, 40 km                                 |

<sup>1</sup> The 250m long range mode is subject to cabling quality and/or IP camera's electrical design. Compatibility testing is recommended prior to use. UTP CAT5e rated cables (or higher) are required.

<sup>2</sup> 19-inch rack-mounting brackets included.

Updated 2023/05/29