



Firmware Version: 4.10.004 **Boot Code Version:** 1.00.012 **MIB Version:** 4.10.002

D-View Module Version: 4.0.0.6 Published: Jan. 04, 2016

These release notes include important information about D-Link switch firmware revisions. Please verify that these release notes are correct for your switch:

- If you are installing a new switch, please check the hardware version on the device label; make sure that your switch meets the system requirement of this firmware version. Please refer to Revision History and System Requirement for detailed firmware and hardware matrix.
- If the switch is powered on, you can check the hardware version by typing "show switch" command via Telnet or by checking the device information page on the web graphic user interface.
- If you plan to upgrade to the new firmware release, please refer to the <u>Upgrade Instructions</u> for the correct firmware upgrade procedure.

For more detailed information regarding our switch products, please refer to Related Documentation.

You can also download the switch firmware, D-View modules and technical documentation from http://tsd.dlink.com.tw.

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Revision History and System Requirement:

Firmware Version	Date	Model	Hardware Version
Runtime: v4.10.004 Boot: 1.00.012	2016/01/04	DES-1210-08P DES-1210-28 DES-1210-28P DES-1210-52	C1
Runtime: v4.00.064 Boot: 1.00.012	2015/05/25	DES-1210-08P DES-1210-28 DES-1210-28P DES-1210-52 DES-1210-52MP	C1
Runtime: v4.00.064 Boot: 1.00.012	2015/02/10	DES-1210-08P DES-1210-28 DES-1210-28P DES-1210-52	C1
Runtime: v4.00.050 Boot: 1.00.009	2014/10/13	DES-1210-28 DES-1210-52	C1
Runtime: v4.00.042 Boot: 1.00.009	2014/08/31	DES-1210-28 DES-1210-52	C1
Runtime: v3.12.015 Boot: 1.00.013	2014/06/12	DES-1210-08P DES-1210-28 DES-1210-28P DES-1210-52	B1
Runtime: v3.11.001 Boot: 1.00.011	2013/07/22	DES-1210-28P	B1
Runtime: v3.10.011 Boot: 1.00.009	2012/11/27	DES-1210-08P DES-1210-28 DES-1210-28P DES-1210-52	B1
Runtime: v2.03.001 Boot: 1.00.004	2012/10/2	DES-1210-08P	A1
Runtime: v2.03.001 Boot: 1.00.003	2012/10/2	DES-1210-28P DES-1210-52	A1
Runtime: v2.11.002 Boot: 1.00.002		DES-1210-28	B1 (f/w not compatible to ver.A1)
Runtime: v2.02.002 Boot: 1.00.004	2011/02/13	DES-1210-08P	A1
Runtime: v2.02.002 Boot: 1.00.003		DES-1210-28 DES-1210-28P DES-1210-52	A1
Runtime: v2.10.000 Boot: 1.00.001	2011/11/28	DES-1210-28	B1 (f/w not compatible to ver.A1)
Runtime: v2.01.002 Boot: 1.00.004		DES-1210-08P	A1
Runtime: v2.01.002 Boot: 1.00.003	2011/04/01	DES-1210-28 DES-1210-28P DES-1210-52	A1
Runtime: v2.00.011 Boot: 1.00.004	2010/12/28	DES-1210-08P	A1
Runtime: v2.00.011	2010/09/20	DES-1210-28	A1





Boot: 1.00.003		DES-1210-28P	A1
		DES-1210-52	A1
Runtime: v1.00.021 Boot: 1.00.002	2010/06/15	DES-1210-28	A1
Runtime: v1.00.018		DES-1210-28	A1
Boot: 1.00.002	2009/11/20	DES-1210-52	A1
Runtime: v1.00.014		DES-1210-28	A1
Boot: 1.00.002	2009/08/20	DES-1210-52	A1

Note1: The firmware v3.10 or later version can only work on hardware version B1. Note2: The firmware v4.00 or later version can only work on hardware version C1.





Upgrade Instructions:

D-Link Smart Switches support firmware upgrade via HTTP, TFTP server and SmartConsole utility. You can download the firmware from D-Link web site http://tsd.dlink.com.tw, and copy the downloaded firmware to the TFTP server folder. Please make sure that the TFTP server is accessible from the switch via networks.

* It is not necessary to upgrade boot code on the switch.

Upgrade using CLI (via Telnet)

- 1. Make sure the network connection between the switch and PC is active.
- 2. Use software that supports telnet, for example, HyperTerminal or Telnet command in Microsoft Windows, to connect to the switch. If you are using Telnet command, type the command followed by the switch IP address, eg. telnet 10.90.90.90.
- 3. The logon prompt will appear.

The switch will prompt the user to enter his/her username and password. It should be noted that upon the initial connection, both the default user name and password are admin.

To upgrade the switch firmware, execute the following command:

Command	Function
Download {firmware_fromTFTP	Download firmware file from the TFTP server to the switch.
tftp://ip-address/filename cfg_fromTFTP	
tftp://ip-address/filename}(1)	

When completing firmware upgrade, the following messages will pop up.

Device will reboot after firmware upgraded successfully Image upgraded successfully

4. Execute the following command to check the firmware version and switch's information.

Command	Function
show switch	Display the information of current firmware and boot version.

Example:

1. **DES-1210-52:**

```
Command: download firmware from TFTP tftp://10.90.90.91
DES-1210-52-C1-4-10-004.hex
Device will reboot after firmware upgraded successfully
Image upgraded successfully
```

2. **DES-1210-52**:

```
Command: show switch
DES-1210-52> show switch
System name
System Contact
System Location
                                : 0 days, 0 hrs, 2 min, 31 secs
System up time
                                : 01/01/2016 00:02:19
System Time
System hardware version
                                : C1
```



System firmware version : 4.10.004 System boot version : 1.00.012 System serial number : QBDES12105200 MAC Address : 9C-D6-43-AA-58-77

Upgrade using Web-UI

- Connect a workstation installed with java SE runtime environment to any port of the switch. 1.
- 2. Open the web browser from the workstation and enter the IP address of the switch. The switch's default IP address is 10.90.90.90.
- 3. Enter administrator's password when prompted. The password is admin by default.
- 4. To update switch's firmware or configuration file, select **Tools** > **Firmware Backup & Upgrade** from the banner.



Two options: HTTP or TFTP



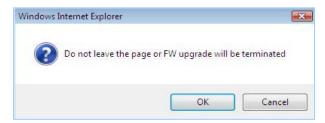
- Select **HTTP** to upgrade with the firmware in your local PC drives. 6.
 - a. Click **Browse** to browse your inventories for a saved firmware file
 - b. Click **Upgrade** after selecting one
 - c. Click **OK** to continue upgrade





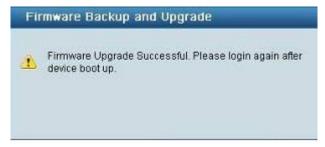


d. Click **OK** to continue



e. Wait until the "Firmware Upgrade Successful" message pops up and login again after device boots up.





- 7. Select **TFTP** to upgrade the firmware from a remote TFTP server.
 - a. Enter the name of the firmware file located on the TFTP server
 - b. Click **Upgrade** after selecting the firmware file you want to restore
 - c. Click **OK** to continue with firmware upgrade



d. Wait until the firmware upgrade ends and login again after device boots up.







New Features:

Firmware Version	New Features
V/4 40 004	1. Support EEE setting (default: disable).
V4.10.004	2. Support Legacy PD mode option (DES-1210-08P/28P)
V4.00.064	1. Add new models DES-1210-52MP C1
V4.00.050	1. Add new models DES-1210-08P/28P C1
V4.00.042	1. Add new models DES-1210-28/52 C1

Firmware Version	New Features
V3.12.015	 Enhance DDP(D-Link discover protocol) to version 0.24 Add new command: debug information Add new default D-Link OUI for Auto Surveillance setting
V3.11.001	 Add UI for D-Link discover protocol setting. Password setting in configuration file
V3.10.011	 Upgrade Loopback Detection version to v4.04 Change Link Aggregation group numbers: DES-1210-08P: 4 groups DES-1210-28/28P: 14 groups DES-1210-52: 26 groups Support IPv6 Neighbor Discovery Support IPv6 ACL Support CoS based on ToS, TCP/UDP port number, and IPv6 Traffic Class Support IPv6 management through HTTP, SSL, Telnet, and SNMP Support IPv6 address configuration for external servers: RADIUS, TFTP, system log, DHCP, and SNTP server Support Traffic Segmentation Support Smart Binding Support ICMPv6 Support IPv4/v6 Dual Stack Support IPv4/v6 Core Ready Logo phase II
V2.03.001	None
V2.02.002 V2.11.002	Add a pre-defined OUI for D-Link IP Surveillance and NVR devices in function Auto Surveillance VLAN.
V2.10.000	None





V2.01.002	 Add Portuguese Web UI Add more configurations in Auto Surveillance VLAN
V2.00.011	 Web GUI supports multiple languages Auto Surveillance VLAN ARP Spoofing Prevention DHCP Server Screening DHCP Auto Configuration Multicast Filtering: An option to filter or forward unregistered groups. SNMPV3 SSL Debug info command
V1.00.021	None
V1.00.018	None
V1.00.014	First Release





Changes of MIB & D-View Module:

The new features of MIB file are also included in the corresponding D-View module. Please download the D-View module from http://tsd.dlink.com.tw. For detailed changes of MIB content, please refer to the modification history in each MIB file.

Firmware Version	MIB File	New Features
V4.10.002	DES-1210-08P-CX-4-10-002.mib DES-1210-28-CX-4-10-002.mib DES-1210-28P-CX-4-10-002.mib DES-1210-52-CX-4-10-002.mib	Support Legacy PD mode option (DES-1210-08P/28P).
V4.00.014	DES-1210-08P-CX-4-00-014.mib DES-1210-28P-CX-4-00-014.mib DES-1210-52MP-CX-4-00-014.mib	Support new models for DES-1210-08P/28P/52MP C1
V4.00.011	DES-1210-28-CX-4-00-011.mib DES-1210-52-CX-4-00-011.mib	Support new models for DES-1210-28/52 C1

Firmware Version	MIB File	New Features	
V3.12.004	DES-1210-08P-BX-3_12_004.mib DES-1210-28-BX-3_12_004.mib DES-1210-28P-BX-3_12_004.mib DES-1210-52-BX-3_12_004.mib	 Add object "aclL2RulePriority", "aclL2RuleReplacePriority", "aclL3RulePriority", "aclL3RuleReplacePriority", "aclv6L3RulePriority", "aclv3L2RuleReplacePriority" for ACL 	
V3.11.001	DES-1210-28P-BX-3-11-002. mib	 DDP feature(for DES-1210-28P ver.B1 only) 	
V3.10.011	DES-1210-08P-BX-3_10_008.mib DES-1210-28-BX-3_10_008.mib DES-1210-28P-BX-3_10_008.mib DES-1210-52-BX-3_10_008.mib	For the new features in firmware v3.10.011	
V2.11.002 V2.10.000	DES-1210-28_B1_2_10_000.mib	None (for DES-1210-28 ver.B1 only)	
V2.03.001 V2.02.002	DES-1210-08P_AX_2_01_001.mib DES-1210-28_AX_2_01_001.mib	None	
V2.01.002	DGS-1210-28P_AX_2_01_001.mib DES-1210-52_AX_2_01_001.mib	Add configurations in Auto Surveillance VLAN	
V2.00.011	DES-1210-08P_AX_2_00_004.mib	First release	
V2.00.011	DES-1210-28_AX_2_00_004.mib DES-1210-28P_Ax_2_00_001.mib DES-1210-52_AX_2_00_004.mib	 Auto Surveillance VLAN ARP Spoofing Prevention DHCP Server Screening DHCP Auto Configuration Multicast Filtering SNMPV3 	



		7. SSL
V1.00.021	DES-1210-28_A1_1_00_014.mib	The chipset with date code 0945 or later has potential risk of incorrect memory allocation, so this new firmware integrates a patch code to avoid malfunction of switch.
V1.00.018	DES-1210-28_A1_1_00_014.mib DES-1210-52_A1_1_00_014.mib	Make some object descriptions easy to understanding.
V1.00.014	DES-1210-28_A1_1_00_013.mib DES-1210-52_A1_1_00_013.mib	First release

Firmware Version	D-View Module File	New Features
V4.0.0.6	DView_DES-1210-08PC1_4.0.0.6_setup.exe DView_DES-1210-28C1_4.0.0.6_setup.exe DView_DES-1210-28PC1_4.0.0.6_setup.exe DView_DES-1210-52C1_4.0.0.6_setup.exe	N/A
V4.0.0.5	DVieiew_DES-1210-52MPC1_4.0.0.4_setup.exe	First release
V4.0.0.4	DView_DES-1210-08PC1_4.0.0.4_setup.exe DView_DES-1210-28C1-4.0.0.4_setup.exe DView_DES-1210-52C1_4.0.0.4_setup.exe DView_DES-1210-28PC1_4.0.0.4_setup.exe	First release

Firmware Version	D-View Module File	New Features
V3.10.011	DV_DES-1210-08P_V3.0.0.6_FW_v3.10.0 11.exe DV_DES-1210-28_V3.0.0.6_FW_v3.10.01 1.exe DV_DES-1210-28P_V3.0.0.6_FW_v3.10.0 11.exe DV_DES-1210-52_V3.0.0.6_FW_v3.10.01 1.exe	None (for firmware v3.10.011)
V2.11.002 V2.10.000	DV_DES-1210-28_V2.0.2.3_FW_V2.10.00 0.exe	None (for DES-1210-28 ver.B1 only)
V2.03.001 V2.02.002	DV_DES-1210-08P_V2.0.1.0_FW_v2.01.0 02.exe DV_DES-1210-28_V2.0.1.0_FW_v2.01.00 2.exe	None
V2.01.002	DV_DES-1210-28P_V2.0.1.0_FW_V2.01.0 02.exe DV_DES-1210-52_V2.0.1.0_FW_v2.01.00 2.exe	Add configurations in Auto Surveillance VLAN
V2.00.011	DV_DES-1210-08P_V2.0.0.11_FW_v2.00. 011.exe	First release



V2.00.011	DV_DES-1210-28_V2.0.0.11_FW_v2.00.0 11.exe DV_DES-1210-28P_V2.0.0.11_FW_v2.00. 011.exe DV_DES-1210-52_V2.0.0.11_FW_v2.00.0 11.exe	 Auto Surveillance VLAN ARP Spoofing Prevention DHCP Server Screening DHCP Auto Configuration Multicast Filtering SNMPV3 SSL 	
V1.00.021	DV_DES-1210-28_V1.0.0.10_FW_v1.00.0 18.exe	None	
V1.00.018	DV_DES-1210-28_V1.0.0.10_FW_v1.00.0 18.exe	Modified Legal Trademarks	
	DV_DES-1210-28_V1.0.0.9_FW_v1.00.01 8.exe DV_DES-1210-52_V1.0.0.9_FW_v1.00.01 8.exe	None	
V1.00.014	DV_DES-1210-28_V1.0.0.5_FW_v1.00.01 4.exe DV_DES-1210-52_V1.0.0.5_FW_v1.00.01 4.exe	First Release	





Changes of Command Line Interface:

The section below only shows command line changes that may bring backward compatibility issues with configuration settings for previous version of firmware.

Any new feature commands that do not have backward compatibility issues are not included in the

below section.

Firmware Version (DES-1210 C1)	Changes
V4.10.004	None
V4.00.064	None
V4.00.050	None
V4.00.042	None

Firmware Version	Changes
V3.12.014	None
V3.11.001	None
V3.10.011	None
V2.03.001	None
V2.11.002	None
V2.02.002	None
V2.10.000	None
V2.01.002	None
V2.00.011	None
V1.00.021	None
V1.00.018	None
V1.00.014	First release





Problem Fixed:

Firmware Version	Problems Fixed
V4.10.004	 Fix security issue on HTML page EEE default is changed from enabled to disabled mode Modified wrong STP cost (External Root Cost) on LACP links [DRU20150907000006] Fixed reboots issue: When users open http://10.90.90.90/config.bin or http://10.90.90.90/config.cfg, switch reboots[DRU20150907000005]. Fixed dos prevention issue: When enable dos prevention, IP Phones traffic will be blocked [DRU20150729000002] Fixed 802.1Q VLAN port setting issue: When user delete one certain port, which the port is assigned by one specific VLAN in 802.1Q port, this port can't be set by other VLAN [DRU20150903000003]. Fixed Cable Diagnostics issue [DI20150817000001]. Fixed security issue: the Admin password can be changed by everybody without knowing the Admin password via D-Lin DNA tool 2.0.2.3 [DEUR20150813000005] Fixed the OpenSSL issue: CVE-2015-1789 (OpenSSL before 0.9.8zg)https://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2015-1789 Fixed MAC ACL function problem [DGC20150626000004]. Fixed Port Mirroring issue: when enable Port Mirroring then reboot the device, Port Mirror mode is disable [DRU2015071700000].
V4.00.064	 Fix incorrect text in Germany Web UI. Fix configuration backup page issue in Germany Web UI. Fix IPv6 TFTP FW backup failure issue. Configuration can't be saved successfully in Multicast Filtering Mode [HQ]. Fix incorrect model display issue on SSL certificate [HQ]. IGMP can't create multicast group when device received IGMPv2 report packet without router alert option [HQ]. Fix OpenSSL(CVE-2014-0224) vulnerability issue [DI20141127000003] Security Vulnerabilities Addressed: OpenSSL 0.9.8x does not properly restrict processing of ChangeCipherSpec messages, which allows man-in-the-middle attackers to trigger use of a zero-length master key in certain OpenSSL-to-OpenSSL communications, and consequently hijack sessions or obtain sensitive information, via a crafted TLS handshake, aka the "CCS Injection" vulnerability. Reference: CVE-2014-0224 http://web.nvd.nist.gov/view/vuln/detail?vulnId=CVE-2014-0224 https://www.openssl.org/news/secadv_20140605.txt
V4.00.050	None
V4.00.042	First release
Firmware Version	Problems Fixed
V3.12.015	 Fix reboot issue on telnet session: When client sent some scripts which include window size parameter in a telnet session and also tried to login the device at the same time, the switch will reboot by itself. (DRU20131101000002)



Fix a LBD bug issue which was caused by incorrect MAC address assignment for each physical port. The case example, the sixth byte of Port 6's MAC address is "ff", but switch does not carry 1 to Port 7's MAC address byte 5th, the MAC address of Port 7 caused a duplicated address in the network and affected the behavior of LBD feature. (DI20131031000001)

For example:

This Port7 begins with 00 (with bug)

Port 5 f0:7d:68:ce:d3:fe Port 6 f0:7d:68:ce:d3:ff

Port 7 f0:7d:68:ce:d3:00

This Port7 begins with 00 (bug-fixed)

Port 5 f0:7d:68:ce:d3:fe

Port 6 f0:7d:68:ce:d3:ff

Port 7 f0:7d:68:ce:d4:00

- 3. Fix the compatible issue when working with on other vendor's recovery system devices (DGC20131016000004)
- 4. Fix the bug on Time Profile setting; the predefined time schedule will not work when cross over the midnight (DEUR20131031000008)
- 5. Fix the bug on Multicast feature: When user configured Multicast Filtering function, the configuration will not be saved and back to default setting after rebooting the switch. (DEUR20140103000003)
- 6. Remove the restriction of IP ACL: User can use ACL rule to deny all IP packets except packets with user's source IP (DRU20140120000004)

For example:

control Rx rate limiting

create access profile ip source ip mask 0.0.0.0 profile id 2 config access_profile profile_id 2 add access_id 1 ip source_ip 0.0.0.0 port 1 deny

- 7. Fix the bug on the setting of System Up time: system will show incorrect System Up time after running for a long time (DI20140205000006)
- 8. Fix the bug on smart binding: When user configured IP+ARP +DHCP Snooping verification criteria for Smart Binding, the switch can correctly create the White List for valid user; however, the switch will fail to block the user when IP changed. (DRU20140218000001).
- 1. Fix the issue on the packet format of DHCP relay and DHCP local relay (remote ID type)(DLA20130307000003)
- 2. [PoE]When user set the Power limit from Class1~4 mode to auto mode then reboot the device, user will find the setting is on the original classification setting but no change(DI20130614000007)
- 3. In current setting, if user use Smart Binding Function IP+ARP Inspection mode and enable DHCP Snooping in strict mode/loose mode, the behavior should be the same. But, for previous version, the behavior between strict mode and loose mode are different (HQ).
- 4. Bandwidth management issue (DEUR20130403000001): This issue is due to the burst size is too small. When user test TCP packet rate via iperf tool, they found the result is incorrect due to the burst size is lower than bandwidth
- 5. Unknown Broadcast issue (DUSA20130522000001): This issue is due to we will send DDP packet periodically but no UI could disable the setting.
- 6. Fix the issue on saving configuration file: When user save their own configuration file then reboot the device, they found the configuration/setting file will not be saved (DUSA20130330000002).

V3.10.011 None

V3.11.001



V2.03.001	Some vulnerability issues were reported by DEUR, including directory traversal, encryption, and information disclosure.		
V2.11.002	None		
V2.02.002	 Some internal PoE parameters on DES-1210-08P/28P are changed in order to give some tolerance to potential cable loss. Fixed password setting problem on some character combinations. Fixed the problem that some IP packets cannot pass through a gateway. 		
V2.10.000	None		
V2.01.002	None		
V2.00.011	The menu on the left does not display correctly on Firefox browser V3.6 under 1920*1080 screen resolutions. (HQ20100311000005)		
V1.00.021	The DES-1210-28 chipset with date code 0945 or later has potential risk of incorrect memory allocation, so this new firmware integrates a patch code to avoid malfunction of switch.		
V1.00.018	 The new firmware v1.00.18 fixes the following problems and will be the firmware version for the first shipment: Enabling either Bandwidth Control or Safeguard Engine on DES-1210-28/52 may cause the switch to be unable to pass traffic, and SmartConsole Utility may fail to discover the switch. If the Asymmetric VLAN is enabled, then the default VLAN is not allowed to remove all members. In the "ACL Configuration Wizard" page, if users select from IPv4 address to Any then the Service Type will be unable to choose and key in text. If users create different rules with the same Service Type and Action, the switch will not establish one profile automatically. When 802.3ad LACP on DES-1210-28/52 is enabled, the switch may reboot automatically if the link partner is turned on for LLDP. 		
V1.00.014	First Release		

^{*} D-Link tracking number is enclosed in ()

Known Issues:

Firmware Version	Issues	Workaround
V4.10.004	None	None
V4.00.064	None	None
V4.00.050	None	None
V4.00.042	None	None
V4.00.042	DES-1210-28/52 C1 1. [IGMP Snooping] The device cannot learn IGMP join	NA. We will provide the



packet properly when the injection speed is more than hundred pkts/second"

bug-fixed code to fix this issue.

Firmware Version	Issues	Workaround
V3.10.011	 DES-1210-08P/28/28P, ver.B1 1. The switches have some limitation in Voice VLAN if VoIP phones are untagged and the uplink port is untagged. The voice packets which fit Voice VLAN rule will be sent following the ingress port's PVID, not the VID assigned by Voice VLAN rule. This is a chipset limitation and the forwarding decision is made before the switch replaces its VID. 	Set the untagged uplink port the untagged member of data VLAN (ex.default VLAN 1), and the tagged member of voice VLAN.
	 In function Smart Binding, when mode IP+ARP Inspection is selected, if DHCP Snooping is enabled PC clients may not get IP addresses. 	Select mode ARP Inspection When DHCP Snooping is required. The issue will be fixed in later revision.
V2.11.002 V2.10.000	DES-1210-28, B1 Due to chipset's limitation, the switch can detect cable length on Gigabit ports on 1000M speed mode, but not on 100M.	Detect cable length on 1000M speed mode.
V2.03.001 V2.02.002 V2.01.002	 DES-1210-28/52/28P, A1 QoS: When congestion occurs and queue handling mode is set to Strict, bandwidth was allocated unequally to the ingress flows that have same priority. D-View Module: Information is not synchronous between Web UI and D-view, but it does not affect functions. 	None
	3. D-View Module: Setting failure when setting the 4 LLDP parameters at the same time.	Setting LLDP through Web GUI
V2.02.002 V2.01.002 V2.00.011	DES-1210-08P, A1 Cable Length Display: While connecting a 5-meter cable to the switch, and then immediately unplugging the cable, the Cable Length information is not real-time but is updated after 3 seconds.	None
V1.00.021	None	None
V1.00.018	None	None
V1.00.014	The average throughput in Chariot TCP Multi-ports to one (ex: 24 100M Ports to 1 1000M port) throughput test will automatically be lowered when port speed is set to be auto mode on the gigabit port.	Config Gigabit port speed/duplex to 1000Mbps full force mode.







Related Documentation:

- DES-1210-08P_28_28P_52_52MP User Manual_C1 DES-1210 Series Getting Started Guide

