Data General

Compact

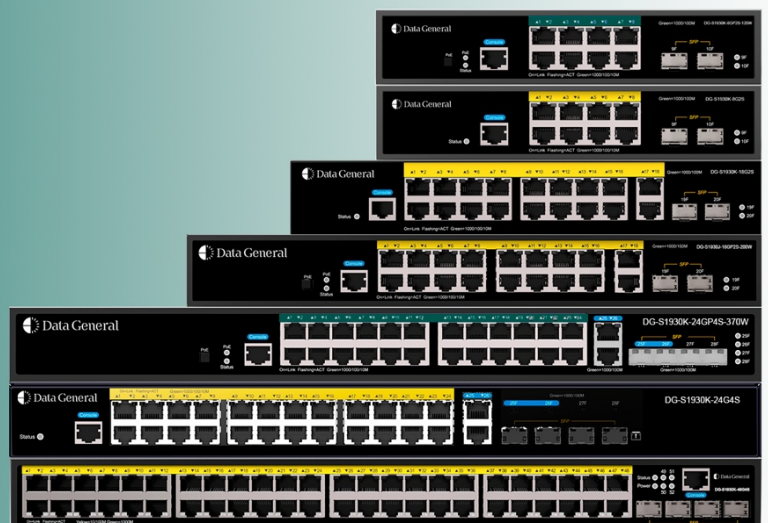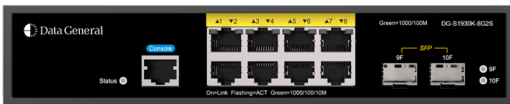*Soundless*

Cloud control

**Gigabit
Access
Switches**

S1930K
series

Overview

DG-S1930K switch series, developed by Data General, is compact access switches featuring high-cost efficiency. Consisting of 8-port, 18-port, 24-port and 48-port models, this series provides abundant port types, like PoE, non-PoE, and Gigabit SFP ports. All these make DG-S1930K an ideal choice for such high-density scenarios as apartments and hotels.
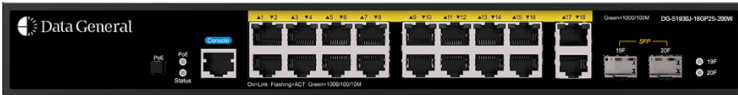
DG-S1930K-8G2S

DG-S1930K-8GP2S-120W

DG-S1930K-18GT2SFP

DG-S1930K-18GP2S-200W

DG-S1930K-24G4S

DG-S1930K-24GP4S-370W

DG-S1930K-48GT4SFP

Data General

| Features

Compactness

Compared with switches of common sizes, this series are smaller in size with a decrease in both depth and width.

The compact design allows DG-S1930K to be mounted on boxes, shelves as well as 19-inch racks.

Fanless Design

Cooling without fans is another major highlight of the series, which is adopted by all models (Except DG-S1930K-24GT4SFP/2GT-P). Particularly, DG-S1930K-18GT2SFP-P and DG-S1930K-48GT4SFP, boasting both compactness and the fanless design, are industry-leading models in hardware.

Fanless cooling means no noise pollution or forced air flows, avoiding dusts and chemical pollutants inhaled into devices to cause corrosion and electrostatic accumulation.

Enterprise Design

DG-S1930K switch series are designed according to the enterprise product design standard of Data General.

This series passes EMC and reliability tests required for enterprise-class products, including RE, CE and Surge tests.

Wide Temperature Range

The operating temperature range of this series is -5°C to 55°C (Except PoE model and DG-S1930K-48GT4SFP).

A wider temperature range enhances the environmental applicability of the product and can bring longer service life and protect customer investment.

Active Management Terminal

DG-S1930K switch series supports real-time detection of the operation status and parameters of terminals, and resets abnormal terminals based on configured policies. With the application of Data General Cloud, management covering the whole network is realized and complexity is dramatically reduced for operation and maintenance.

High Reliability

STP and RSTP are supported to bring fast convergence, high fault tolerance, stable operation of the network, balanced load of links, and reasonable application of network channels and redundant links.

It supports the rapid link detection protocol (RLDP), which quickly detects the on-off of a link and unidirectionality of an optical fiber link and supports loop detection under a port to prevent network failure caused by loops as a result of private connections of hubs or other devices under the port.

This series also supports the specific CPU protection policy (CPP) to differentiate data flows to the CPU and to grade the priority queue. And bandwidth limits are implemented as required to fully protect the CPU resources from being wasted by illegal traffic and malicious attacks, ensuring security of both the CPU and the switch.

Cloud Management and Zero Configuration Online

DG-S1930K switches support cloud management of Data General Cloud, which facilitates device status query, configuration delivery, and operation and maintenance.

For the initial launch, DG-S1930K switches start with configurations assigned by Data General Cloud without complicated manual operations required.

Simple and Easy Network Maintenance

DG-S1930K supports process of auto recovery once software faults are detected.

Web Management is easily accessible with a user plugging in a network cable and configuring the switch via Web Management

Models of this series support remote management, configuration saving and recovery, remote fault diagnosis and historical log analysis.

Technical Specifications

Non-PoE Model		DG-S1930K-8GT 2SFP	DG-S1930K-18GT 2SFP	DG-S1930K-24GT 4SFP/2GT	DG-S1930K-48GT 4SFP
PoE Model		DG-S1930K-8GT 2SFP-P	DG-S1930K-18GT 2SFP-P	DG-S1930K-24GT 4SFP/2GT-P	-
Ports	10/100/1000 BASE-T	8	18	26	48
	1000M SFP	2	2	4 (2 combo ports)	4
Power over Ethernet	PoE	✓	✓	✓	-
	PoE/PoE+ Enabled Ports	8	16	24	
	IEEE 802.3af (PoE)	✓	✓	✓	
	IEEE 802.3at (PoE+)	✓	✓	✓	
	PoE Power Budget	125 W	200 W	370 W	
Physical	Packet Buffer	4.1 Mbits			
	CPU Memory	256 MB			
	Flash	64 MB	64 MB	64 MB	32 MB＋32 MB
	Dimensions (WxDxH)	220 x 150 x 44 mm	280 x 126 x 44 mm	440 x 187 x 44 mm	440 x 208 x 44 mm
		280 x 180 x 44 mm (PoE)	340 x 200 x 43 mm① (PoE)	440 x 208 x 44 mm (PoE)	-
	Unit Weight	≤ 1.1 kg	≤ 1.15 kg	≤ 2.5 kg	≤ 2.8 kg
		≤ 1.7 kg (PoE)	≤ 2.5 kg (PoE)	≤ 3.3 kg (PoE)	-
Power Supply	Type	Internal power supply			
	Frequency	50/60 Hz			
	AC Voltage	100~240 V AC			
	Power Consumption	≤ 15 W ≤ 150 W (PoE)	≤ 15 W ≤ 250 W (PoE)	< 21 W ≤ 430 W (PoE)	≤ 40 W
Cooling	Non-PoE Model	Fanless	Fanless	Fanless	Fanless
	PoE Model	Fanless	Fanless	Fan	-
Certifications	Certificate	VCCI Class A			
	Surge	Communication port lightning protection common mode 6kV Power port lightning protection common mode 4kV, differential mode 2kV			
RoHS		✓			
EEE(IEEE 802.3az)		✓			
Operating Temperature		-5º C to 55º C -5º C to 50º C (PoE)	-5º C to 55º C -5º C to 50º C (PoE)	-5º C to 55º C -5º C to 50º C (PoE)	-5º C to 50º C
Storage Temperature		-40º C to 70º C			
Operating Humidity		10% to 90% RH			

Non-PoE Model		DG-S1930K-8GT 2SFP	DG-S1930K-18GT 2SFP	DG-S1930K-24GT 4SFP/2GT	DG-S1930K-48GT 4SFP
PoE Model		DG-S1930K-8GT 2SFP-P	DG-S1930K-18GT 2SFP-P	DG-S1930K-24GT 4SFP/2GT-P	-
Storage Humidity		5% to 95% RH			
Operating Altitude		-50 m to 2,000 m			
MTBF		> 200,000 hours			
Warranty		3-Year Warranty Free of Charge			
Performance	Switching Capacity	20 Gbps	40 Gbps	56 Gbps	104 Gbps
	Forwarding Rate	15 Mpps	30 Mpps	42 Mpps	78 Mpps
	ARP Table Size	256			
	MAC Table Size	8,192			
L2 Switching	STP	✓			
	RSTP	✓			
	MSTP	✓			
	Port Grouping	✓ (LACP, 8 ports)			
	VLAN	✓ (IEEE 802.1Q/ Private VLAN/ MAC VLAN[2]/ Voice VLAN[3]/ Protocol VLAN / VLAN Mapping[4])			
	IGMP Snooping	✓ (v1/v2)			
	Jumbo Frame	9,216 Bytes			
L3	IPv4 Routing[5]	Direct Routing			
	IPv6 Routing	Released in the future			
	Ping	✓ (IPv4)			
	Traceroute	✓ (IPv4)			
	DHCP Client	✓			
	DHCP Relay	Released in the future			
Reliability	RLDP	✓			
Security	CPP	✓			
	NFPP	Released in the future			
	SSH	✓			
	SSL	✓			
	IEEE 802.1X	Released in the future			
	Port Security[6]	✓			
	ACL	✓			
	DHCP Snooping	✓ (Trusted Port Deployment)			

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Non-PoE Model		DG-S1930K-8GT 2SFP	DG-S1930K-18GT 2SFP	DG-S1930K-24GT 4SFP/2GT	DG-S1930K-48GT 4SFP
PoE Model		DG-S1930K-8GT 2SFP-P	DG-S1930K-18GT 2SFP-P	DG-S1930K-24GT 4SFP/2GT-P	-
QoS⑦	Stream Classification	✓ (Classification based on IEEE 802.1p/DSCP)			
	Rate-Limit	✓ (Rate-Limit on ingress/egress traffic on interface)			
	Congestion Avoidance	✓ (Tail drop)			
	Congestion Management	✓ (8 queues)			
Management	Web User Interface	✓			
	Loop Port Visualization	✓ (The detected loop port is displayed on the web)			
	HTTP/HTTPS	✓			
	Data General Cloud Management	✓ (TR069)			
	Command Line Interface	Telnet / Console / SSH			
	SNMP	✓ (v1 / v2c / v3)			
	SYSLOG	✓			
	NTP	✓			
	DNS Client	✓			
	SPAN	✓			
	Public MIBs	✓			
	Private MIBs	✓			
	Zero Config	✓ (Requiring connection with Data General Cloud)			
	Firmware Upgrade	✓ (Upgrade via Data General Cloud / WEB / CLI)			

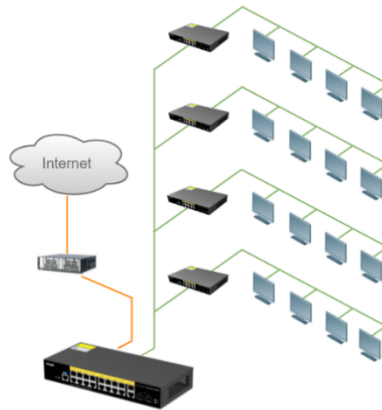| Energy Conservation Law				
Model	Energy Consumption Efficiency	Maximum Transmission Rate	Port Speed	Energy Saving Standard Rate
DG-S1930K-8GT2SFP	0.67 W/Gbits	10 Gbps	1000 Mbps	432%
DG-S1930K-8GT2SFP-P	1.33 W/Gbits	10 Gbps	1000 Mbps	261%
DG-S1930K-18GT2SFP	0.69 W/Gbits	20 Gbps	1000 Mbps	344%
DG-S1930K-18GT2SFP-P	0.92 W/Gbits	20 Gbps	1000 Mbps	310%
DG-S1930K-24GT4SFP/2GT	0.72 W/Gbits	28 Gbps	1000 Mbps	310%
DG-S1930K-24GT4SFP/2GT-P	0.89 W/Gbits	28 Gbps	1000 Mbps	318%
DG-S1930K-48GT4SFP	0.70 W/Gbits	52 Gbps	1000 Mbps	296%

Notes:
① *The shell size of DG-S1930K-18GT2SFP-P is 340 × 200 × 43 mm, but because of a protruding heat sink on the left side, the actual size is 348 × 200 × 43 mm.*

② *MAC VLAN is not supported on aggregation ports. For MAC VLAN, the cos value can't be changed.*

③ *Voice VLAN is not supported on aggregation ports. For Voice VLAN, cos and DSCP values cannot be changed.*

④ *VLAN Mapping is only supported on the Output direction and only works for 802.1Q tagged packets.*

⑤ *IP Routing refers to SVI-based static direct routing and default routing.*

⑥ *Port security is not supported on aggregation ports. For Port Security, dynamic address learning is not supported. The sticky parameter is not supported. Safe address cannot be static or filtered MAC addresses.*

⑦ *In the QoS module, policy map is not supported.*

※ *Port LEDs are green in all statuses except DG-S1930K-48GT4SFP.*

Typical Application

DG-S1930K series switches boast small size, simple operations and high-cost performance in various scenarios, including rental apartments, SOHO offices, small and medium-sized hotels and enterprises.

For hotel and apartment scenarios, the switches can be deployed in the equipment box of each floor in large -sized apartments and hotels, and for small-sized apartments with less than 20 rooms, they can be directly deployed at the network entrance of apartments and hotels.

Ordering Information

Description	Model
DG-S1930K-8GT2SFP	8 10/100/1000BASE-T ports, 2 100/1000Base-X SFP ports, 1 console port, AC power supply
DG-S1930K-8GT2SFP-P	8 10/100/1000BASE-T ports, 2 100/1000Base-X SFP ports, Support PoE/PoE+(Port 1-8), PoE power budget: 125 W, 1 console port, AC power supply
DG-S1930K-18GT2SFP	18 10/100/1000BASE-T ports, 2 100/1000Base-X SFP ports, 1 console port, AC power supply
DG-S1930K-18GT2SFP-P	18 10/100/1000BASE-T ports, 2 100/1000Base-X SFP ports, Support PoE/PoE+ (Port 1-16), PoE power budget: 200 W, 1 console port, AC power supply
DG-S1930K-24GT4SFP/2GT	26 10/100/1000BASE-T ports, 4 100/1000Base-X SFP ports (2 combo ports), 1 console port, AC power supply
DG-S1930K-24GT4SFP/2GT-P	26 10/100/1000BASE-T ports, 4 100/1000Base-X SFP ports (2 combo ports), Support PoE/PoE+ (Port 1-24), PoE power budget: 370 W, 1 console port, AC power supply
DG-S1930K-48GT4SFP	48 10/100/1000BASE-T ports, 4 100/1000Base-X SFP ports, 1 console port, AC power supply

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