

SG Unified Security Gateways

DG-EG3250 / DG-SG2100-2W8GP-135W

Data General LLC For further information, please visit our website <u>https://www.datageneral.co</u>

Product Overview

Data General SG Next-generation Unified Security Gateway is a multi-functional Cloud Managed Security Gateway product for various industries. Equipped with high-performance multi-core MIPS hardware architecture, the EG Gateway supports a wide range of features such as high-performance NAT, WAN load balancing, smart flow control, online behavior management, visualized IPsec VPN¹, web authentication, etc.

Taking advantage of integrated Hard Disk Drive² (HDD), the EG Security Gateway can provide local storage for Internet activities logging, which is essential for National Internet Security Compliance in many countries.

Data General SG Next-generation Unified Security Gateway is also supported by Data General Cloud, altogether with switches and wireless access points, Data General Cloud can provide a comprehensive secure networking platform for centralized management allowing for device monitoring, configuration as well as firmware management.

For ease of provisioning, Data General provide an innovative Mobile App Dummy Provisioning³ for SME customers. In less than 3-min, user can complete the Gateway initial setup with Internet connectivity, without any PC setup or cable installation.

There are two models available for Security Gateway, DG-EG3250 & DG-SG2100-2W8GP-135W Feature highlights of Data General SG Next-generation Security Gateway Series:





DG-SG2100-2W8GP-135W



Note:

- ¹The VPN feature is not available for Russia regions
- ²Available for DG-EG3250 model
- ³ Available for DG-EG3250 model, and at least one Data General Wireless Access Point is required

Product Features

Smart Flow Control & AAA Integration

€) Da	ta General	WEB Administrator: adm	nin			C Setup Wizard	Alarm	R Customer Service	🗗 Log Out
∆ Home	Traffic Monitoring	Smart Flow Control	Advanced Flow Control	Settings					
∎ 🗠 Flow	Flow Control Policy		1		-		-		
() Security	Audit Report				11				
Q User	Behavior Policy Object		Normal app key app Rate limited App				8		
(Network			1 Key Service Guaranteed	Advanced P2P Control Approach	3 VPN Flow Control	User-Frien Experience			
(©) Advanced			Key service is given priority when bandwidth is not enough	P2P streams are controlled at the source. Once key service is enabled, P2P traffic will back off	You can perform flow control on VPN traffic	With system ter can finish 90% o by dragging an	configuration		
					Enable				

- Smart P2P speed limit, accurate identification of P2P software, and automatic transmission of uplink source quench message to control the downlink traffic and prevent downlink bandwidth exhaustion
- Support over 120 popular application in DPI engine and enjoys FREE for life signature update
- Role-based flow control based on usernames and user groups to facilitate the allocation of bandwidths according to different departments
- Support AAA (Authentication, Authorization and Accounting) with web authentication, integration with AAA Software and simple traffic accounting feature

Flexible Authentication⁴

With integration with Data General Cloud Service (wis.datageneral.cloud), the Data General SG Security Gateway provide the easy, secure and flexible authentication experience for various business scenarios.

All account or portal management can be managed at Data General Cloud centrally, but all authentication⁵ are processed locally at EG Gateway, which guarantee for authentication performance and the highest availability, such that any connectivity error with Data General Cloud service will not bring any service interruptions to the user authentication service.

Note:

⁴ Data General Cloud integration required

⁵ In exception with Facebook login and PPSK, of which authentication processing will be at Data General Cloud

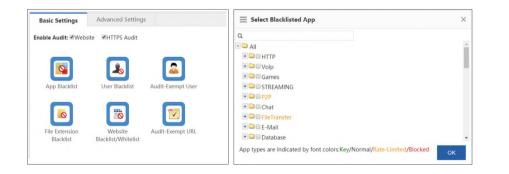
D for Guest			
(Option2)		SSID for Visitor/Pay Guest	SSID for Staff
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		Antidanimatin	PPSK
One-click / Facebook ogin with time		Voucher Code with time and rate-limit	Every Staff with One-time Unique
	One-click / Facebook	One-click / Facebook agin with time	WIS cloud Image: Strategy of the





Multiple Logins at same portal - allow for multiple guest access policy simultaneously

Online Behavior Management



Data General SG Next-generation Unified Security Gateway provides detailed online behavior management of the intranet users, blocking a variety of non-work-related websites to create a good working atmosphere and improve work efficiency.

VPN Visualization⁶

Select a Position:	/ Network Position
🧭 Headquarter 😻 😻 👽 👼	2 Branch Type
Set the current device as Headquater devices to it.	3 VPN Type
	4 Finish
Internet Mobile User	
O Branch	
Set the current device as Branch device and connect the terminal	
devices to it to access the Branch Branch Headquater,	
Branch Branch	
	Back Next

Data General Security Gateway has significantly simplified the VPN configuration, which could be completed just by a few clicks, eliminating the need for professional maintenance. The gateway enables users to view and control the traffic in the VPN tunnel, establishing a visualized VPN to guarantee the security of key services using VPN.

Traffic Analysis

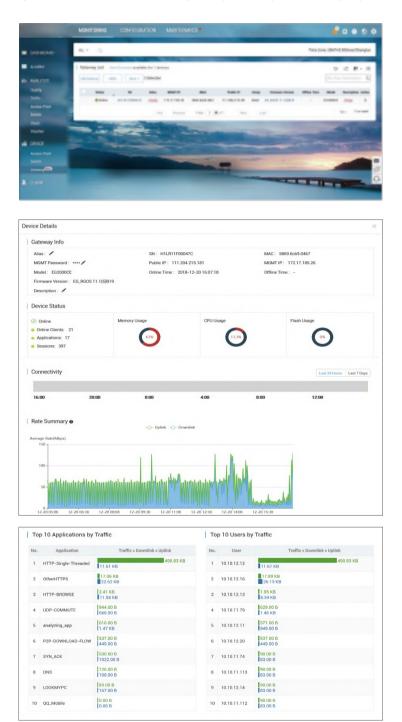
Equipped with powerful DPI technology, the Data General SME Security Gateway collects traffic usage statistics based on users, applications and links for report generation, providing reliable historical data for bandwidth expansion as well as user and application-based bandwidth control policies.

Flow Control	Key App 24.65Kbps ↓ 199.8Kbps ↑	Normal App 0Kbps↓ 0Kbps↑	Rate-limited App 0Kbps ↓ 0Kbps ↑
Search App	 HTTP-BROWSE DNS 	Google+	
Bandwidth	⊞ HTTPS ■	T facebook	🛨 🔛 P2P
	표 🧠 Chat	twitter	主 🚍 OnlineStorage
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User User	🛨 🔤 HTTP-BROWSE-DETAIL	Pinterest Whatsapp	
VPN Flow Control	🗉 🗖 ICMP-DETAIL	Instagram	
Blocked	Security		
Арр	Vpn-app OA office	🗖 Reddit	
Change Solution	Video conferencing	Snapchat	-

Centralized Cloud Management

Couple with Data General WIS Cloud, the Data General SG Security Gateway is now able to be monitored & managed from the centralized cloud services. Data General Cloud is the free cloud-based management platform for all the Security Gateway series. No hardware or servers

Note: ⁶ The VPN feature is not available for Russia regions required to be installed on customer premise. Device monitoring, configuration changes & firmware management can be performed easily in anytime, anywhere & anyway.



EG Security Gateway Device Info and Top N Traffic Analysis on Data General Cloud management platform

Intuitive Mobile App

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	• Internet		@Cloud_Voucher	No. Clients	Traffic Bownlink	Uplink		e Rate(Mbps)		Lust 24 Hours	
	0/1			1 192.168.1.2	2 1000		Averaç 15	00	1	1	
	EG2000CE			2 192.168.1.5				25- 50-			
				3 192.168.1.2				75-	he all		
				4 192.168.1.8				06:28 08:20	10.12 12.04 13.5		
	• XS-S1960-			5 192.168.1.3			I T	op 10 Appli			
	-97			Device Log	1		No.	Applications	Traffic Do	wnlink 📕 Uplink	
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Apart from the accessing cloud management dashboard from workstation, Data General offer an alternative to manage Security Gateway from your fingertips, a tailor-made Mobile App you can download from Google Play and Apple Appstore. You can now access to Security Gateway even you're away from your PC.

Mobile App Provisioning for Dummy



For ease of provisioning, Data General provide an innovative Mobile App Dummy Provisioning⁷ for SME customers. In less than 3-min, user can complete the Gateway initial setup with Internet connectivity, without any PC setup or cable installation.

App Caching for Download Acceleration

Data General SG Gateway provide exclusive Caching technology for any media files resources and Mobile App (Android APK), the files will download from EG Cache directly without go through the Internet. The feature is exceptionally help for situation with high volume for same identical file downloading, such as Games, Mobile App, System Patches, etc. but the internet line speed is not fast sufficient or expensive.



Note:

⁷Available for DG-EG3250 model, and at least one Data General Wireless Access Point is required

One of most popular application is for shopping malls, retails chain, F&B, Airport, Metro Company with own Mobile App for O2O business, membership promotion, and value-added service. Guest or Visitors very often will download the same Mobile App during the peak hours, and long downloading is definitely expected because of Internet or Server-side bottleneck issues.

EG Security Gateway Hot Spot Resource Table: Review for the Hit Ratio for cache resources

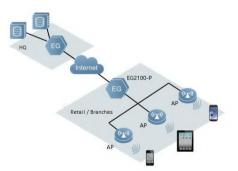
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Built-in Internet Audit Log Storage

At the heart of most devices that provide protection for IT networks is an ability to log events and take actions based on those events. Data General SME Security Gateway (EG3250 and EG3230 model only) supports detail logging both on what has happened to the device and what is happening. A local attached 1TB hard disk provides sufficient storage to keep all the necessary audit logging trail. It increases the higher logging retential period before it is exported to external logging server.

∂ Home	Behavior Policy	Access Audit Report				
Common	Access Audit Report	Today's Audit Report				
	Object	User(IP)	Website	Website Type	Access on	Action
₩ Flow		/192.168.2.6(192.168.2.6)	http://online.kugou.com/pull?ver=9068&c	UNKNOW	2019-01-31 17:46:18	Allow
.		/192.168.2.6(192.168.2.6)	https://avisec.com	UNKNOW	2019-01-31 17:45:59	Allow
Behavior		/192.168.2.6(192.168.2.6)	https://www.baldu.com	Blocked	2019-01-31 17:45:59	Blocked
Cache		/192.168.2.6(192.168.2.6)	https://baldu.com	Blocked	2019-01-31 17:45:59	Blocked
		/192.168.2.6(192.168.2.6)	http://14.215.177.39/	UNKNOW	2019-01-31 17:45:49	Allow
Security		/192.168.2.6(192.168.2.6)	http://14.215.177.38/	UNKNOW	2019-01-31 17:45:49	Allow
		/192.168.2.6(192.168.2.6)	https://jpush.cn	UNKNOW	2019-01-31 17:45:28	Allow
		/192.168.2.6(192.168.2.6)	https://ruijienetworks.com	UNKNOW CLASS	2019-01-31 17:42:25	Allow
() Network		/192.168.2.6(192.168.2.6)	https://cloud.tencent.com	UNKNOW	2019-01-31 17:39:34	Allow
1		/192.168.2.6(192.168.2.6)	https://vivo.com.cn	UNKNOW	2019-01-31 17:36:07	Allow

Built-in Power-Over-Ethernet (POE)



Designed for retail, small organizations and distributed enterprises with remote and branch offices, the DG-SG2100-2W8GP-135W integrate support for PoE devices. It come with 7 POE Out ports to provide power to and endpoint like, video cameras, security access control (card scanners), point-of-sales devices, IP phones, wireless access point and many more. It eliminates the complexity of providing extra power cabling especially the small organization or retail wireless network deployment. Cost and time saving!

Technical Specifications

Model	DG-SG2100-2W8GP-135W	DG-EG3250	
	Hardware Specification	on	
CPU	Multi-core MIPS		
Fixed Ports	8 1000BASE-T ports (7x POE/POE+)	8 1000BASE-T ports 1 SFP port 1 SFP+ port (non-combo)	
WAN Ports	Upto 2	Upto 6	
Flash	4GB EMMC	8M SPIFLASH	
Hard Disk	N/A	Standard 1TB	
Memory	512M	2G	
	Performance & Featu	ire	
	1000Mbps (1518 bytes)	6000Mbps (1518 bytes)	
Performance	450Mbps (512bytes)	3725Mbps (512bytes)	
	70Mbps (64 bytes)	800Mbps (64 bytes)	
Concurrent Session	100,000	600,000	
Recommended Concurrent User ⁸	300	2000	
Portal Authentication Capacity	100 (Max Concurrent Users)	1500 (Max Concurrent Users)	
Portal Authentication Type	Username/Password Auth (Local, Windows-based AD/LDAP Integration) One- click Authentication; Guest Voucher (Data General Cloud required)		
Seamless Authentication (Portal)	Support		
App Caching	Support		
Cache Capacity	750MB	100GB	
Cache Resources	Android APK files (non- https server required)	Windows System Patches	
Network Protocol	OSPF Support DHCP Relay and DHCP Serv Support PPPoE Client	cluding static routing, RIP (V1 / V2) and ver ncluding FTP, H.323, DNS, etc. Support	

Note:

⁸Each user approx. 300 concurrent sessions

Model	DG-SG2100-2W8GP-135W	DG-EG3250			
Application Visibility	Support self-developed 43 types of applications/ more than 120 application features, customizable protocol identification: P2P: BitTorrent, eMule, Thunder, EDONKEY, FlashGet & etc. Multimedia: YouTube, Facebook Video, WebEx Conference & etc. Social Media: Facebook, Twitter, LinkedIn, Pinterest & etc. VOIP/Chat: Skype, Viber, Google Hangout, Jabber, Facebook Messenger & etc. Instant Messaging/Email: Gmail, MSN, QQ, YAHOO & etc. Software Update: Window, McAfee, Kaspersky, ESET & etc. Cloud-based File Collaboration: GoogleDrive, Dropbox, OneDrive, iCloud & etc. Enterprise Application : HTTP, FTP, SMTP, POP3, IMAP, Telnet, LOTUS- NOTES, SQL Server, Oracle, Mysql, HTTPS & etc.				
URL Filtering	Support HTTP/HTTPS domain filtering Support remote HTTP automatic URL library upgrade Local log storage (NAT log, traffic log, URL log, etc.) Support storage on external log server				
WAN Load Balancing	Support(upto 2 WAN Port)	Support (upto 6 WAN Port)			
High Availability	N/A	VRRP,RIP(Graceful Restart), OSPF(Graceful Restart)			
IPsec VPN Tunnel ⁹					
Network Security	Anti-ARP Spoofing Defense against malicious attacks from in secure address binding Block WAN Ping Prevent Port Scan Attack Prevent Fragmentation Attack Prevent ICMP Flood Attack Prevent Teardrop Attack Prevent Ping of Death Attack Prevent Land Attack Prevent Smurf / Fraggle attack Prevent SYN Flood Attack	ternal and external networks Support			
Layer 2 Features	N/A	Support Bridging Support LAN Port Aggregation			
Data General Cloud Integration Feature	Support device health monitoring status Support centralized configuration change Support Top 10 Application/User traffic vis Support device firmware management Support event-based alarm notification				
Other Features	Integrate with AAA software to support mu	Itiple authentication modes			
Other Features Service and Support	Support push advertising page Support multi-link load balancing Support remote HTTP online upgrade to version, etc. Lifetime Free signature library upgrade	for signature library, software			
Rack Height	1U	1U			

Note:

⁹ The VPN feature is not available for Russia regions

Model	DG-SG2100-2W8GP-135W	DG-EG3250
Weight	2kg	4kg
Power Supply	100-240V,50-60Hz,3A	100-240V,50-60Hz,0.65A
PoE Budget	135W	NA
Power Consumption	<150W	<25W
Dimensions (W x D x H) (mm)	200×200x43.6	440×200×43.6
Operating Temperature	0°C to 45°C	0°C to 40°C
Operating Humidity	10% to 90%RH	10% to 90%RH
MTBF	N/A	>200,000 Hours

Typical Application

Data General SG Next-gen Unified Security Gateway is a multi-functional security gateway product integrated with NAT, security, acceleration, flow control and online behavior management features, which is designed to optimize Internet Gateway Solutions, providing customers with simplified Internet gateway network, optimized Internet experience, flexible online behavior management and other features.

Security Gateway can be applied as Internet gateway for scenarios such as hotels, shopping mall, higher education, primary and secondary schools, enterprise networks, retails, small business, etc.



Typical Application Scenario for Hotel and SME Office



Typical Application Scenario for Retail Chain store

Application Features:

- Support integration with AAA authentication and Data General Cloud unified management
- Multi-link load balancing makes full use of the limited network bandwidth by efficient traffic allocation based on bandwidth/load
- Support user online behavior management such as blacklist URL blocking, user activity tracking and URL monitoring, etc.
- Feature-rich L7 Application visibility to track user traffic and apply necessary remediation
- All VPN traffic and site topology or VPN tunnel status easily be visualized by built-in VPN Web GUI module
- With build-in HDD storage, NAT/URL internet activities are stored for future internet compliance log purpose
- Unique App Caching (both EG2100P v2 and EG3200 series) provide ultrafast O2O Mobile App download experience

Ordering Information

Model	Description
DG-EG3250	All-in-one Unified Security Gateway, 8 GE ports (upto 6 WAN port), 1SFP, 1SFP+ ports (non-combo) , 1TB Hard disk (Lifetime free L7 DPI signature update), recommended for 2000 concurrent user scenario
DG-SG2100-2W8GP-135W	All-in-one Smart Access Gateway, 8 GE ports (upto 2 WAN & 7 LAN port) upto 7x POE/POE+ (Lifetime free L7 DPI signature update), Rack Mount Kit included, recommended for 300 concurrent user scenarios