SG Unified Security Gateways

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

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

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 VPN[1], web authentication, etc.

Taking advantage of integrated Hard Disk Drive[2] (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 Provisioning[3] 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:

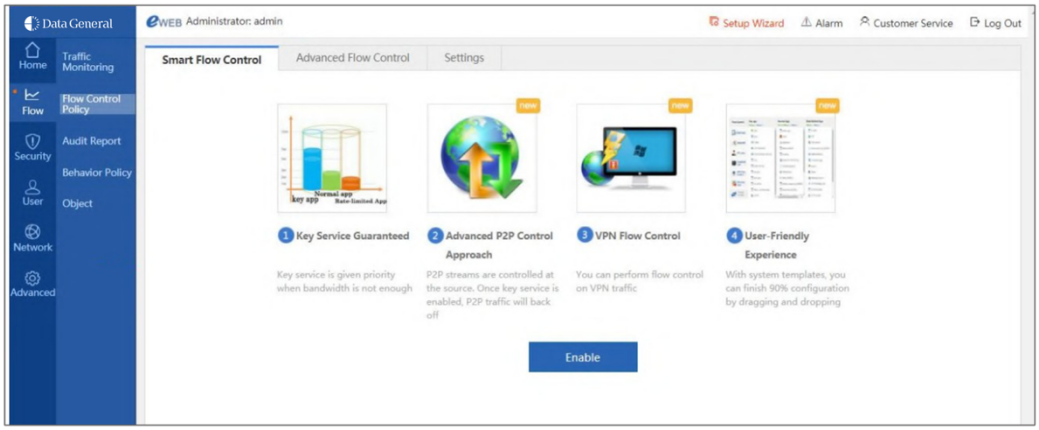
DG-SG2100-2W8GP-135W

DG-EG3250

Note:
[1] The VPN feature is not available for Russia regions
[2] Available 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



- 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 Authentication[4]

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 authentication[5] 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:

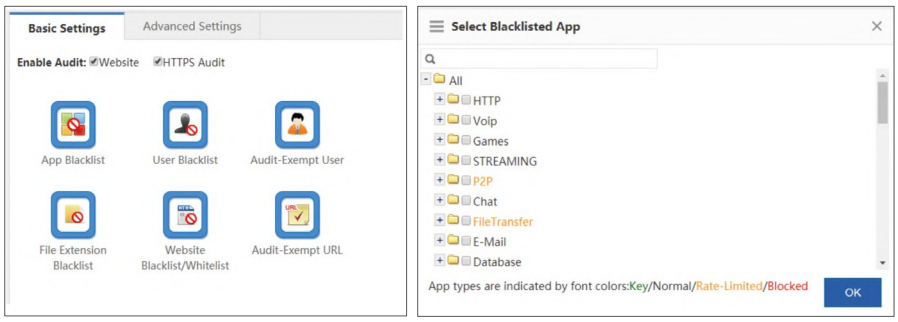
[4] Data General Cloud integration required

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

Data General SG provides rich access security policy for guest and staff

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

Online Behavior Management



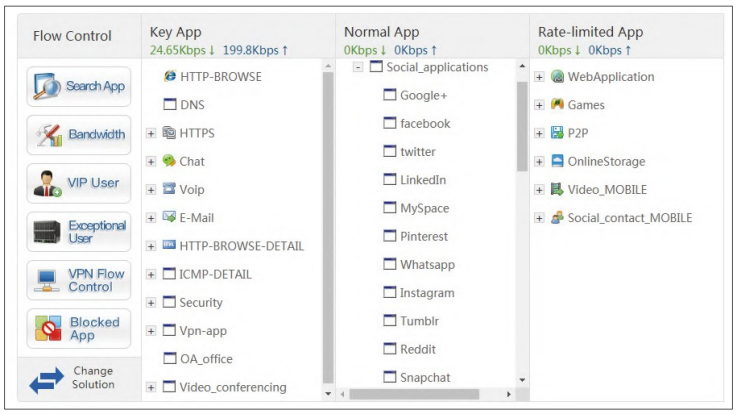
Data General SG Next-generation Unified Security Gateway provides detailed online behavior management of the intranet users, blocking a variety of non-work-related websites to create a good working atmosphere and improve work efficiency.

VPN Visualization[6]

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.

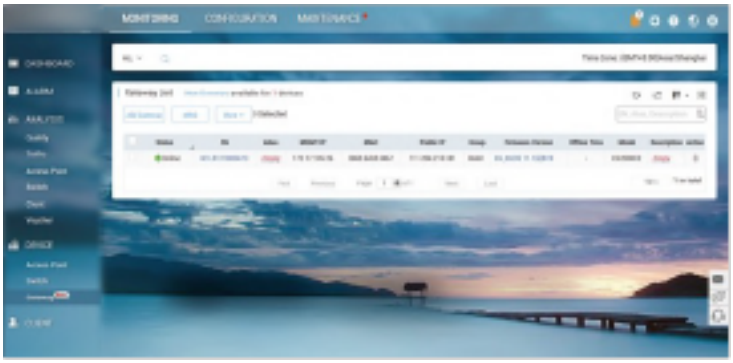


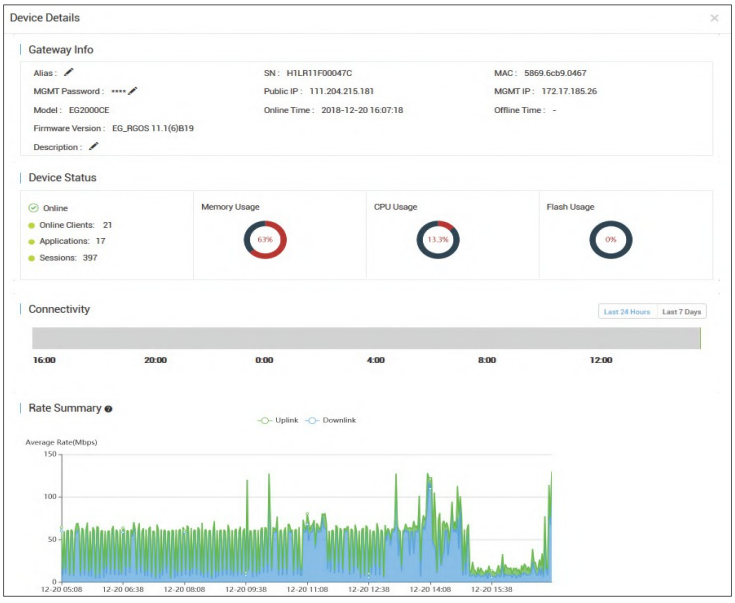
Centralized Cloud Management

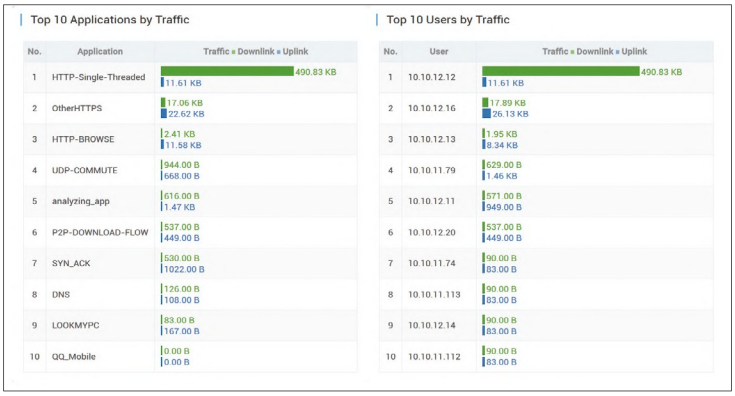
Couple with Data General WIS Cloud, the Data General SG Security Gateway is now able to be monitored & managed from the centralized cloud services. Data General Cloud is the free cloud-based management platform for all the Security Gateway series. No hardware or servers

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.

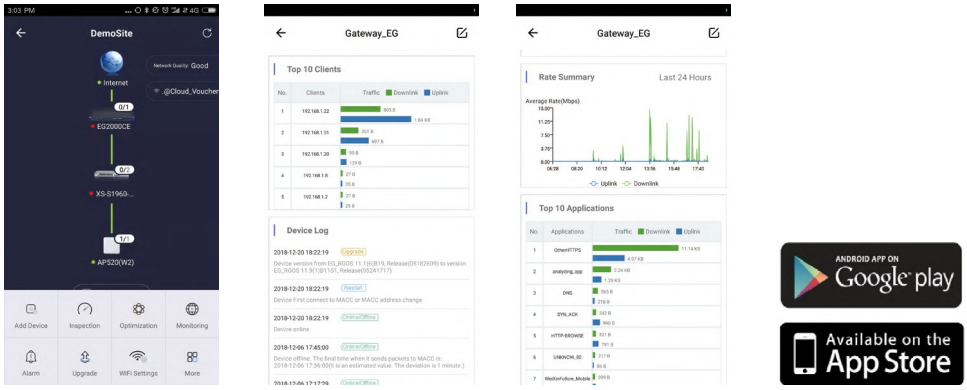






EG Security Gateway Device Info and Top N Traffic Analysis on Data General Cloud management platform

Intuitive Mobile App



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 Provisioning[7] 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.

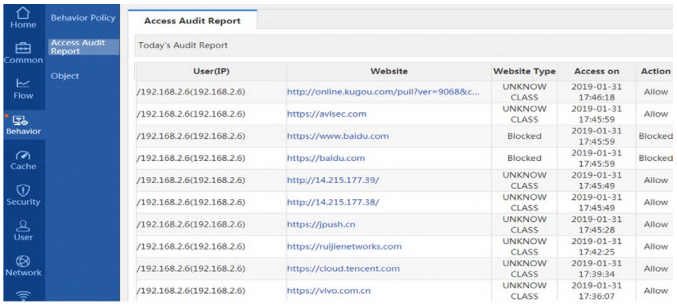
Note:
[7] Available for DG-EG3250 model, and at least one Data General Wireless Access Point is required

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.

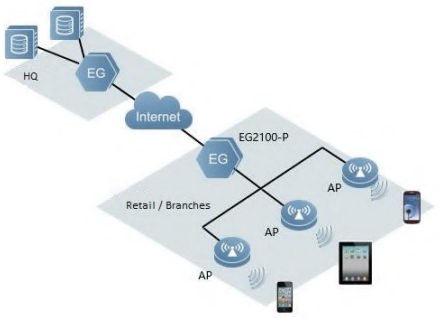
EG Security Gateway Hot Spot Resource Table: Review for the Hit Ratio for cache resources

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.



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		
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 & Feature		
Performance	1000Mbps (1518 bytes)	6000Mbps (1518 bytes)
	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	Support TCP/IP protocols, including IP, ICMP, TCP, UDP, etc. Support multiple routing protocols, including static routing, RIP (V1 / V2) and OSPF Support DHCP Relay and DHCP Server Support PPPoE Client Support NAT and multiple NAT ALG including FTP, H.323, DNS, etc. Support ARP, trusted ARP, proxy ARP, etc. Support Ping and Traceroute fault detection	

Note:
[8] Each 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]	16	1000
Network Security	Anti-ARP Spoofing Defense against malicious attacks from internal and external networks Support 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	
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 management & backup Support Top 10 Application/User traffic visualization Support device firmware management Support event-based alarm notification	
Other Features	Integrate with AAA software to support multiple authentication modes	
Other Features Service and Support	Support push advertising page	
	Support multi-link load balancing	
	Support remote HTTP online upgrade for signature library, software version, etc.	
	Lifetime Free signature library upgrade	
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