

## Next-Generation Firewall NGFW - 3800



Despite the convenience of Internet, it brings along with itself various nuisances and security risks such as spam, viruses, Trojans, hacker attacks, etc., making your wired / wireless network more and more complex to manage.

Accordingly, Nusoft presents you with NGFW-3800, the ultimate solution to network security and management concerns. It helps you establish the zero trust (2FA Text Message) and SD-WAN architecture and ensures the security of your information. Its AI filter, multi-layered spam filtering and training mechanisms help filter out unsolicited and virus-infected emails, merely keeping the legitimate ones.

As for malicious code such as Trojans, worms and viruses, all can be effectively kept out of the network using its inbuilt anti-virus engine. Together with IDP system and WAF, it leaves hackers with no chance and eliminates security threats once for all.

In addition, it seamlessly integrates with SPI firewall, AP controller, Web filter, load balancer, mobile network support, QoS manager, application blocker, VPN manager, email auditing and archiving and more, effortlessly facilitating wired / wireless network management with simply a single device. Better yet, IDP/ spam/ signature updates are free of charge, which drastically reduce your ownership cost of IT infrastructure.

### Product Features

#### SPI / Internal Firewall

Based on ICSA-certified SPI firewall technology, NGFW-3800 can be deployed at the network perimeter to fully protect against various security threats. In addition, the NIC Teaming feature enables it to physically segment a network, adding an extra layer of protection by serving as an internal firewall to deliver advanced security (anti-virus, IDP, etc.) and controls (privilege, authentication, QoS, schedule, etc.), efficaciously increasing the security of internal network.

#### Zero Trust Security (2FA Text Message)

The 2-factor authentication text message feature is provided. A security code is sent to the authenticated users' registered phone number. (authenticated for VPN connection or network access) Users should enter the code to gain access. This feature could strengthen user access security and protect against leakage of confidential data.

#### One-Time Password Authentication

An unpredictable and unrepeatable password can be generated at each login using Nusoft OTP (available for iOS and Android devices), offering your network a two-factor authentication protection.

#### Proactive Intrusion Detection & Prevention (IDP)

The IDP inspection focuses on OSI layer 4 (transport layer) through 7 (application layer) to block malicious code and attacks originating from the Internet. Aside from the default signatures and an auto-update at a 30-minute interval, custom signatures and timely reporting are also provided for better network protection and diagnosis.

#### Web Filtering

Administrators are allowed to use black/white list and restrict file transfers, MIME types and browser scripts, as well as provided with detailed logs and statistics for diagnosis.

#### Anti-Virus Engine

The inbuilt anti-virus engine is able to effectively filter out over fifty thousand kinds of viruses, Trojans, spyware, phishing frauds, etc.

#### Web Application Firewall (WAF)

It offers PCI DSS and HIPAA compliance by the support of Web 2.0 technologies, various server types (Apache, IIS, etc.) and multiple scripting languages (Perl, Python, TCL, PHP, etc.). Not only the Web application attacks can be blocked, but also the detailed reporting are provided.

#### Using AI to Filter out Spam

Besides multiple filtering mechanisms such as Fingerprint, Bayesian, Spam signature, Greylist, Rule, Black/White list, etc., AI Anti-Spam (subscription) is also added for you to filter spam. The self-learning mechanism enables NGFW-3800 to filter out mutated spam based on the detail of emails (such as writing in other words, writing in other languages, changing the page layouts, using the pictures, etc.). In addition, deep learning mechanism is continuously trained by the detail of emails. This enables NGFW-3800 to achieve 99% filter accuracy which is much greater than any other anti-spam appliance on the market.

In addition, quarantined messages may be retrieved by their intended recipients through a mail notice which is sent at designated times without the intervention of network administrator, greatly reducing the management load.

#### Email Auditing & Archiving

Audit rules can be applied to email messages to prevent sensitive information leakage prior to their delivery. Apart from that, mission-critical messages are archived for subsequent investigation and available for access through a Web-based user interface from any computer at any time.

#### Detailed Mail Reports

The processing of email messages are visualized in intuitive statistical graphs, giving the administrator an instant insight into email security service, such as spam filtering and virus scanning.

## Customizable & Scalable NIC Modules

Up to 10 to 32 ports (RJ45/ SFP/ SFP+, expandable by using Virtual WAN feature) are available for defining as LAN, WAN, DMZ, or isolated NIC groups. The user-definable interface frees you from the limits of default NIC properties and offers flexibility to network implementation.

## Mobile Network Support

The mobile network modem can be plugged into NGFW-3800 to be used as a WAN interface. In addition, stability and continuity are delivered to wireless network through the link failover, load balancing and policy-based routing capabilities. This is suitable for environments where non-stop wireless connectivity is needed.

## Flexible Bandwidth Management

NGFW-3800 adds flexibility to bandwidth management not only by delivering guaranteed or maximum bandwidth along with prioritized access, but also by limiting the individual QoS or traffic quota.

Besides, the bandwidth-intensive applications (e.g., P2P) can be regulated to prevent bandwidth from being exhausted by minorities.

## Internet-based Application Blocking

The use of instant messaging (both login and file transfer), peer-to-peer sharing, multimedia streaming, web-based email service, online gaming, VPN tunneling and remote controlling can be effortlessly blocked by their packet signatures.

## Wireless AP Controller

With the AP controlling capability, NGFW-3800 is able to centrally manage a number of access points, allowing you to perform a unified configuration, view AP status on Google Maps, check wireless client status, detect rogue APs, etc. It also helps prevent traffic from being congested to a specific AP by evenly load balancing wireless connections, effectively avoiding network bottleneck. Additionally, a dedicated mobile app for monitoring on the go is made available on both iOS and Android.

As for wireless client access, network policies can be applied to implement various authentication mechanisms (Captive Portal / RADIUS / LDAP / POP3), QoS, charge guests for Wi-Fi service, block Internet-based applications and more, fulfilling all your wireless management needs.

Note: The AP controller feature is only applicable for Nusoft APs.

## Total VPN Solution and SD-WAN Architecture

With the built-in IPSec / PPTP / L2TP/ SSL/ Open VPN support, NGFW-3800 provides you a fast, reliable and safe private connection.

It features SD-WAN to deliver link failover and bandwidth aggregation capabilities to VPN tunnels, greatly increasing the speed and stability of your Internet connection. This can be used to reduce the ownership cost of network infrastructure by replacing the expensive leased line with multiple low-cost DSL links, as well as to ensure the continuity of mission-critical services.

Moreover, it also can effectively boost the security of VPN connectivity using its advanced security (anti-virus, IDP, etc.) and controls (authentication, QoS, etc.).

## Full IPv6 Compatibility

NGFW-3800 is fully compatible with IPv6 addressing, the mainstream Internet protocol in the future. No additional budget is required for implementing another IPv6-based gateway simply for IPv4-to-IPv6 address translation.

## Bi-directional Load Balancing & Policy-based Routing

Supporting multi-WAN ports with load balancing, the NGFW-3800 can distribute outbound traffic across WAN links, due to which it delivers bandwidth aggregation and link failover capabilities, making the most of bandwidth, and yet connecting reliably. Besides, inbound traffic to your company website can be evenly load-balanced across each link to mitigate the load of Web requests, ensuring the accessibility to the website should any link failure occur.

Moreover, the network traffic generated from a specific service or user can be routed through a designated WAN link based on the company's network policies.

## Global Server Load-Balancing (GSLB)

When the datacenters are geographically centralized, the services provided to users usually ceased due to server failures.

Accordingly, the Global Server Load-Balance feature is integrated in NGFW-3800. This feature enables you to locate the servers separately around the world, in addition, services continuity is ensured by its cross-datacenter failover feature. The traffic can also be distributed across servers located in different datacenter, preventing single server from being overloaded. Furthermore, by providing the service to the users who are geographically close to them, it can reduce time latency and improve the response time, bettering the user experience.

## Business Promotion via Facebook Page Sharing / Weibo Check-in

By combining Wi-Fi authentication with Facebook page sharing / Weibo check-in, the free Wi-Fi service can be provided to customers who check in to your business location on Weibo or share your Facebook page. This combination can not only attract customers, but also grow your business exposure. When customers check in to use your Wi-Fi service, their friends can see your Facebook page/ Weibo in their News Feed, which gets your Facebook page/ Weibo to spread virally, allowing you to reach out to potential customers and increase profits for your business.

## Business Promotion via Image/Video Advertising

By combining Wi-Fi authentication with Sponsored Ad, customers are presented with the video/ image advertisement before starting to surf the Internet. This combination not only can attract customers but also can help promote your businesses and events.

## Business Promotion via LINE@ / WeChat Official Account

By integrating LINE@ / WeChat official account with Wi-Fi authentication, the free Wi-Fi service can be provided to customers who have friended the business's LINE@ account/ WeChat official account.

This helps business strengthen ties with their customers and draws potential customers from online channels to physical stores.

(Online-to-offline commerce)

## Product Highlights

Highlight	Benefit	Third-Party Product
AI Filter	Filters out all the mutated spam at the first moment.	Unable to maintain the accuracy of spam filter when there is a new mutated spam email.
Customizable & scalable NIC modules	Enables you to define, group, or increase NIC ports, as well as allows you to create multiple virtual WAN links over a physical WAN link for the needs of a large network.	Either fixed to factory default or incapable of multi-WAN load balancing.
Unified network management	Provides an effortless network management through a unified user interface.	Merely a firewall equipped with simple security mechanisms and cluttered management interfaces; operation requires a separate configuration for each feature.
Email quarantine notification	Notifies recipients of quarantined messages and enables them to retrieve emails on their own.	Leaves recipients unaware of quarantined messages and requires network administrator's intervention to retrieve emails.
LAN security mechanisms	Secures LAN networks with anomaly flow detection and switch co-defense capabilities, as well as offer protection by serving as physical internal firewall.	No protection against DoS attack initiated from within the network.
Flexible bandwidth management	Adds flexibility to bandwidth management by applying settings of guaranteed/ maximum bandwidth, priority, traffic quota and P2P QoS.	Lacks flexibility in bandwidth management due to the only option being maximum bandwidth.
Total VPN solution and SD-WAN architecture	Securely tunnels network connections using PPTP/IPSec/L2TP/SSL/Open VPN along with SD-WAN and policy-based management (anti-virus, IDP, etc.).	Network security is at risk due to the lack of link failover, bandwidth aggregation and advanced controls.
Various authentication mechanisms	Greatly increases the network security by using zero-trust security and one-time password for user authentication.	Network security is at risk due to sole reliance on user credentials for authentication.
Policy-based routing	Allows in- / outbound traffic to be routed based on network polices.	Only comes in outbound routing capability and has no manageability.
Internet-based application blocking	Blocks the use of Internet-based applications such as IM clients, P2P software, etc.	Lacks management of the use of Internet-based application.
Bi-directional load balancing, GSLB	Ensures stable connectivity to the Internet (outbound traffic) and provides visitors reliable access to your website (inbound traffic).	Fails to meet the needs of building network service and global server load-balance.
Session persistence capability (for online banking & gaming)	Performs load balance by source IP to avoid connection interruption when connecting the online banking and gaming services.	No solution available for online banking or gaming service interruption due to IP inconsistency.
AP & Wi-Fi client management	Centrally manages a number of APs as well as applies network policies to wireless client access (e.g., QoS, website category, etc.).	Requires a purchase of an AP controlling device.
Free marketing via Wi-Fi service	The combination of Wi-Fi service and Facebook sharing/ Weibo check-in, Image/ Video advertising and LINE@/ WeChat official account can be used for business promotion.	Requires an annual fee for business promotion via social networking site.
Mobile Network Support	Uses mobile network modem as a WAN interface with link failover, load balancing and policy-based routing capabilities.	Lacks either mobile network modem support or link failover and load balancing capabilities.



SPI Firewall



Custom NIC Ports



SD-WAN



Total VPN Solution



Zero Trust Security



OTP Authentication



IDP



Anti-Virus



AI Filter



Mail Auditing



Mail Archiving



AP Controller



Multi-WAN Load Balancing



Link Failover



GSLB



Application Blocking



QoS



Anomaly Traffic Detection

## NGFW Series Product Comparison

Model		NGFW-710	NGFW-910	NGFW-1700A	NGFW-2800	NGFW-3800
HDD Capacity		1 TB	1 TB	1 TB	1 TB	1 TB
Networking	No. of NIC Ports	6 (GbE)	6 (GbE)	6 (GbE)+4 (10GbE)	10~26 (GbE/10GbE)	10~32 (GbE/10GbE)
	Connector Type	RJ45	RJ45	RJ45 & SFP+	RJ45/SFP/SFP+	RJ45/SFP/SFP+
	Custom NIC Ports	○	○	○	○	○
Power Redundancy		✗	✗	✗	✗	○
Form Factor		1U Rackmount	1U Rackmount	1U Rackmount	1U Rackmount	2U Rackmount

### Features

IPv6 Compatibility		○	○	○	○	○
Virtual WAN		○	○	○	○	○
SPI / Internal Firewall		○	○	○	○	○
AP Controller	AP Unified-Configuration	○	○	○	○	○
	AP Info/ E-Map	○	○	○	○	○
	Connection Status Notification	○	○	○	○	○
	Wi-Fi Client Management	○	○	○	○	○
	AP Load Balancing	○	○	○	○	○
	Active Client List	○	○	○	○	○
	Wi-Fi Billing	○	○	○	○	○
	Dedicated App	○	○	○	○	○
Marketing through Social Networking Site	Facebook/Weibo Marketing	○	○	○	○	○
	Image/ Video Advertising	○	○	○	○	○
	LINE/ WeChat Marketing	○	○	○	○	○
Email Security	AI Filter	○ [subscription]	○ [subscription]	○ [subscription]	○ [subscription]	○ [subscription]
	Multi-Layered Spam Filtering	○	○	○	○	○
	Virus email scan	○ [subscription]	○ [subscription]	○ [subscription]	○ [subscription]	○ [subscription]
	Mail Notice	○	○	○	○	○
	Archiving / Auditing	○	○	○	○	○
Zero Trust Security / OTP Authentication		○/○	○/○	○/○	○/○	○/○
Anti-Virus Engine		○ [subscription]	○ [subscription]	○ [subscription]	○ [subscription]	○ [subscription]
IDP		○	○	○	○	○
Up- / Download Blocking		○	○	○	○	○
Load Balancing(In- / Outbound) /Policy-based Routing		○	○	○	○	○
Global Server Load-Balance (GSLB)		○	○	○	○	○
Application Blocking		○	○	○	○	○
Various QoS Mechanisms		○	○	○	○	○
VPN Connectivity	IPSec / PPTP VPN	○	○	○	○	○
	SSL/ L2TP/ Open VPN	○	○	○	○	○
	SD-WAN	○	○	○	○	○
VLAN / VLAN Trunking		○	○	○	○	○
AAA Server		○	○	○	○	○
High Availability		○	○	○	○	○
WAF		○	○	○	○	○
Mobile Network Support		○	○	○	○	○