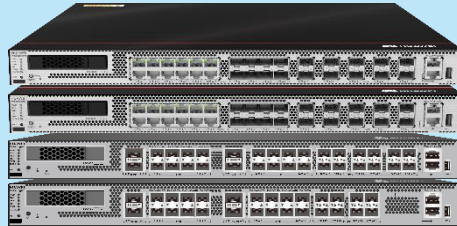


HiSecEngine Eudemon1000E-F Series

AI Firewalls



Overview

The Eudemon1000E-F is a new series firewall developed by Huawei to meet the needs of carriers, enterprises, and next-generation data centers. It combines industry-leading security technologies such as access control, intrusion prevention (IPS), antivirus (AV), URL filtering, anti-spam, and data loss prevention with rich security, robust processing and carrier-class reliability.

Inheriting the Eudemon series' outstanding firewall, VPN, and routing features, it helps you build a fast, efficient, and secure network.

Product Highlights

Comprehensive and Integrated Protection

- Integrates the traditional firewall, VPN, intrusion prevention, antivirus, data leak prevention, bandwidth management, URL filtering, and online behavior management functions all in one device.
- Implements refined bandwidth management based on applications and websites, preferentially forwards key services, and ensures bandwidth for key services.
- Comes with an antivirus content-based detection engine (CDE) powered by intelligence technologies that helps detect unknown threats, and provides in-depth data analysis to gain insight into threat activities and quickly detect malicious files, effectively improving the threat detection rate.

Easy Security Management

- Rapidly deploys security policies using scenario-specific templates.
- Complies with the minimum permission control principle and automatically generates policy tuning suggestions based on network traffic and application risks.
- Analyzes the policy matching ratio and discovers redundant and invalid policies to remove policies and simplify policy management.
- Supports Huawei SecoManager to achieve a unified configuration, management and maintenance of all devices.

High Performance

- Uses the network processing platform, improving forwarding performance significantly.
- Enables pattern matching and accelerates encryption/decryption, improving the performance for processing IPS, antivirus, and IPSec services.

High Port Density

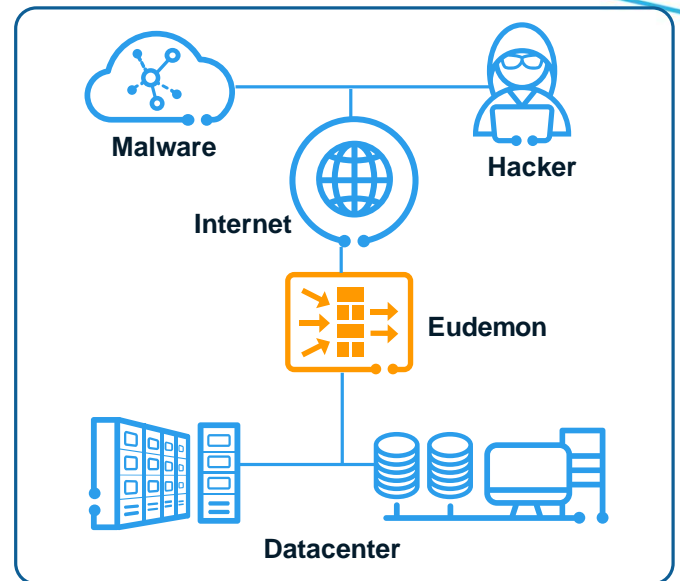
- The device has multiple types of interfaces, such as 100G, 40G, 10G, and 1G interfaces. Services can be flexibly expanded without extra interface cards.

Note: The interface types supported by different models vary. For details, see the specification table.

Deployment

External Threat Prevention

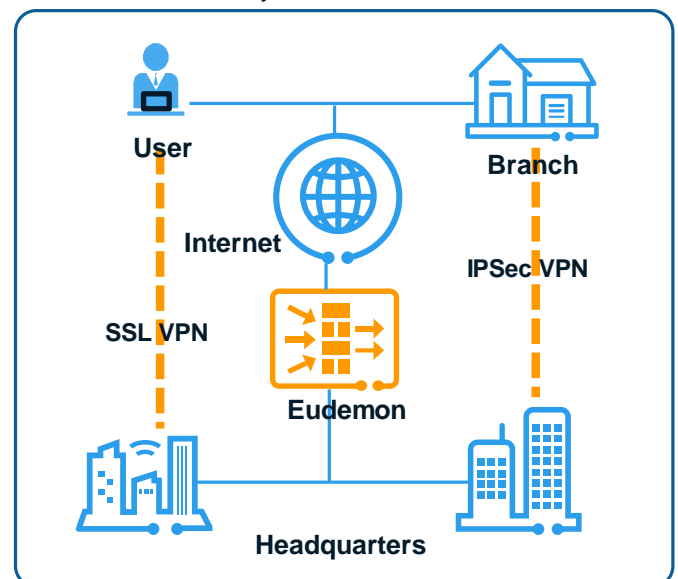
- Coming along with the abundant Internet resources are threats such as DDoS attacks, malicious intrusions, and viruses.
- The capabilities of supporting large numbers of concurrent connections and new connections per second help to combat the numerous DDoS attacks. Empowered by advanced IPS and antivirus technologies as well as vulnerability-based and real-time updated signature database, the Eudemon 1000E-F series implements near-zero false positives and negatives and a detection ratio of higher than 99%; defends against diversified threats from the Internet, and ensures the security of the intranet.



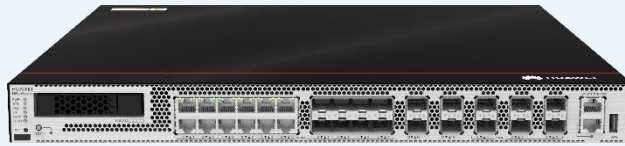
Network Isolation and VPN

Interconnection

- Network areas are not clearly divided, access control is insufficient, and the data transmitted between mobile employees or branches and the headquarters is likely to be intercepted or tampered with.
- Delivers high throughput to avoid bottleneck at network borders, supports security zones to clearly divide networks, offers flexible packet filtering policies to accurately control communication, and encapsulates and checks packets of VPN users to ensure the security of data communication.



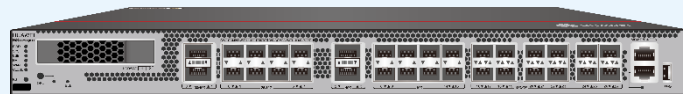
Hardware



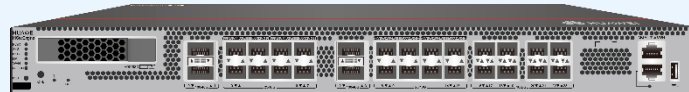
Eudemon1000E-F15/F25



Eudemon1000E-F35/F55/F85



Eudemon1000E-F125



Eudemon1000E-F205

Software Features

Feature	Description
Integrated protection	Integrates firewall, VPN, intrusion prevention, antivirus, data leak prevention, bandwidth management, anti-DDoS, URL filtering, and anti-spam functions. Provides a global configuration view, and manages policies in a unified manner.
Application identification and control	Identifies over 6000 applications and supports the access control granularity down to application functions. The firewall combines application identification with intrusion detection, antivirus, and data filtering, improving detection performance and accuracy.
Intrusion prevention and web protection	Accurately detects and defends against vulnerability-specific attacks based on up-to-date threat information. The firewall can defend against web-specific attacks, including SQL injection and XSS attacks.
Antivirus	Supports intelligent antivirus engine that helps detect hundreds of millions of virus variants.
Bandwidth management	Manages per-user and per-IP bandwidth in addition to identifying service applications to ensure the network access experience of key services and users. Control methods include limiting the maximum bandwidth, ensuring the minimum bandwidth, and changing application forwarding priorities.

Feature	Description
URL filtering	Supports remote query for URL categories. The URL category database contains over 140 million URL categories. URL category query servers are deployed globally to offer high-speed, low-latency category query services and meet the regulatory requirements of different countries and regions. URL category filtering can implement URL access control for users or groups based on information such as users or groups, time ranges, and security zones, accurately managing users' online behaviors.
Intelligent uplink selection	Supports service-specific PBR and intelligent uplink selection based on multiple load balancing algorithms (for example, based on bandwidth ratio and link health status) in multi-egress scenarios.
VPN encryption	Supports multiple highly available VPN features, such as IPSec VPN, SSL VPN, and GRE, as well as multiple encryption algorithms, such as DES, 3DES, AES, and SHA.
Anti-DDoS	Defends against more than 10+ types of common DDoS attacks, including SYN flood and UDP flood attacks.
Security virtualization	Supports virtualization of multiple types of security services, including firewall, intrusion prevention, antivirus, and VPN. Users can separately conduct personal management on the same physical device.
Security policy management	Controls traffic based on the 5-tuples, security zone, application, and time range, and implements integrated content security detection. Uses predefined templates for common attack defense scenarios to rapidly deploy security policies, reducing learning costs.
Diversified reports	Provides visualized and multi-dimensional report display by user, application, content, time, traffic, threat, and URL.
Routing	Supports multiple types of routing protocols and features, such as RIP, OSPF, BGP, IS-IS, RIPng, OSPFv3, BGP4+, and IPv6 IS-IS.
Deployment and reliability	Supports transparent, routing, and hybrid working modes and high availability (HA), including the Active/Active and Active/Standby modes.

Specification

Performance and Capability

Performance and Capability	Eudemon1000E-F15	Eudemon1000E-F25
IPv4 Firewall Throughput ¹ (1518/512/64-byte, UDP)	15/15/15 Gbit/s	25/25/25 Gbit/s
IPv6 Firewall Throughput ¹ (1518/512/84-byte, UDP)	15/15/15 Gbit/s	25/25/25 Gbit/s
Firewall Throughput (Packet per Second)	22.5 Mpps	37.5 Mpps
Firewall Latency (64-byte, UDP)	18 μs	18 μs
FW + SA* Throughput ²	8Gbps	12Gbps
NGFW Throughput ³	6Gbps	10Gbps
NGFW Throughput(Enterprise Mix) ⁴	4.6Gbps	4.6Gbps
Threat Protection Throughput (Enterprise Mix) ⁵	4Gbps	4Gbps
Concurrent Sessions (HTTP1.1) ¹	10,000,000	10,000,000
New Sessions/Second (HTTP1.1) ¹	250,000	250,000
IPSec VPN Throughput ¹ (AES-256 + SHA256, 1420-byte)	10 Gbit/s	15 Gbit/s
Maximum IPSec VPN Tunnels (GW to GW)	15,000	15,000
Maximum IPSec VPN Tunnels (Client to GW)	15,000	15,000
SSL VPN Throughput ⁶	1 Gbit/s	1.5 Gbit/s
Concurrent SSL VPN Users (Default/Maximum)	100/2000	100/2000
Security Policies (Maximum)	40,000	40,000
Virtual Firewalls	1000	1000
URL Filtering: Categories	More than 130	
URL Filtering: URLs	Can access a database of over 120 million URLs in the cloud	
Automated Threat Feed and IPS Signature Updates	Yes, an industry-leading security center from Huawei (http://sec.huawei.com/sec/web/index.do)	
Centralized Management	Centralized configuration, logging, monitoring, and reporting is performed by Huawei SecoManager	
VLANs (Max)	4094	
VLANIF Interfaces (Max)	1000	
High Availability Configurations	Active/Active, Active/Standby	

Note:

1. Performance is tested under ideal conditions based on RFC2544, 3511. The actual result may vary with deployment environments.

2. SA performance is measured using 100 KB HTTP files.

3. NGFW throughput is measured with Firewall, SA, and IPS enabled; the performance is measured using 100 KB HTTP files.

4. NGFW throughput is measured with Firewall, SA, and IPS enabled; the performance is measured using the Enterprise Mix Traffic Model.

5. The threat protection throughput is measured with Firewall, SA, IPS, and AV enabled; the performance is measured using the Enterprise Mix Traffic Model.

6. SSL VPN throughput is measured using TLS v1.2 with AES128-SHA.

*SA: Service Awareness.

Hardware Specification

Hardware Specification	Eudemon1000E-F15	Eudemon1000E-F25
Dimensions (H x W x D) mm	43.6 x 442 x 420	
Form Factor/Height	1U	
Fixed Interface	8*GE COMBO + 4*GE(RJ45) + 4*GE(SFP)+ 6*10GE(SFP+)	
USB Port	1 x USB 3.0 ports	
Weight (Empty Configuration)	6.3 kg	
Local Storage	Optional, 1 * 2.5 inch 240G SSD storage, or 1 * 2.5 inch 1TB HDD storage	
Maximum Power Consumption	222W	
AC Power Supply	AC:100V to 240V, 50/60Hz DC: -48V to 60V	
Power Supplies	Dual AC or dual DC power supplies	
Operating Environment (Temperature/Humidity)	Temperature: 0°C to 45°C (without optional HDD); 5°C to 40°C (with optional HDD) Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 95% (with optional HDD), non-condensing	
Non-operating Environment	Temperature: -40°C to +70°C Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 95% (with optional HDD), non-condensing	
Operating Altitude (Maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)	
Non-operating Altitude (Maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)	
Noise	Maximum value < 72 Dba	

Specification

Performance and Capability

Performance and Capability	Eudemon1000E-F35	Eudemon1000E-F55	Eudemon1000E-F85
IPv4 Firewall Throughput ¹ (1518/512/64-byte, UDP)	35/35/35 Gbit/s	50/50/40 Gbit/s	80/80/40 Gbit/s
IPv6 Firewall Throughput ¹ (1518/512/84-byte, UDP)	35/35/25 Gbit/s	50/50/25 Gbit/s	80/80/25 Gbit/s
Firewall Throughput (Packet per Second)	52.5 Mpps	60 Mpps	60 M pps
Firewall Latency (64-byte, UDP)	18 μs	18 μs	18 μs
FW + SA* Throughput ²	18Gbps	25Gbps	25Gbps
NGFW Throughput ³	12Gbps	18Gbps	18Gbps
NGFW Throughput (Enterprise Mix) ⁴	8Gbps	8Gbps	8Gbps
Threat Protection Throughput (Enterprise Mix) ⁵	7Gbps	7Gbps	7Gbps
Concurrent Sessions (HTTP1.1) ¹	20,000,000	20,000,000	25,000,000
New Sessions/Second (HTTP1.1) ¹	500,000	500,000	750,000
IPSec VPN Throughput ¹ (AES-256 + SHA256, 1420-byte)	20 Gbit/s	30 Gbit/s	30Gbit/s
Maximum IPSec VPN Tunnels (GW to GW)	20000	20000	20000
Maximum IPSec VPN Tunnels (Client to GW)	20000	20000	20000
SSL VPN Throughput ⁶	3 Gbit/s	3 Gbit/s	5 Gbit/s
Concurrent SSL VPN Users (Default/Maximum)	5000	5000	100/5000
Security Policies (Maximum)	60,000	60,000	60000
Virtual Firewalls	1000	1000	1000
URL Filtering: Categories	More than 130		
URL Filtering: URLs	Can access a database of over 120 million URLs in the cloud		
Automated Threat Feed and IPS Signature Updates	Yes, an industry-leading security center from Huawei (http://sec.huawei.com/sec/web/index.do)		
Centralized Management	Centralized configuration, logging, monitoring, and reporting is performed by Huawei SecoManager		
VLANs (Max)	4094		
VLANIF Interfaces (Max)	1000		
High Availability Configurations	Active/Active, Active/Standby		

Note:

1. Performance is tested under ideal conditions based on RFC2544, 3511. The actual result may vary with deployment environments.
 2. SA performance is measured using 100 KB HTTP files.
 3. NGFW throughput is measured with Firewall, SA, and IPS enabled; the performance is measured using 100 KB HTTP files.
 4. NGFW throughput is measured with Firewall, SA, and IPS enabled; the performance is measured using the Enterprise Mix Traffic Model.
 5. The threat protection throughput is measured with Firewall, SA, IPS, and AV enabled; the performance is measured using the Enterprise Mix Traffic Model.
 6. SSL VPN throughput is measured using TLS v1.2 with AES128-SHA.
- *SA: Service Awareness.

Hardware Specification

Hardware Specification	Eudemon1000E-F35	Eudemon1000E-F55	Eudemon1000E-F85
Dimensions (H x W x D) mm	43.6 x 442 x 420		
Form Factor/Height	1U		
Fixed Interface	8*GE COMBO + 4*GE(RJ45)+ 10*10GE(SFP+)		
USB Port	1 x USB 3.0 ports		
Weight (Empty Configuration)	7.3 kg		
Local Storage	Optional, 1 * 2.5 inch 240G SSD storage, or 1 * 2.5 inch 1TB HDD storage		
Maximum Power Consumption	242W		
AC Power Supply	AC:100V to 240V, 50/60Hz DC: -48V to 60V		
Power Supplies	Dual AC or dual DC power supplies		
Operating Environment (Temperature/Humidity)	Temperature: 0°C to 45°C (without optional HDD); 5°C to 40°C (with optional HDD) Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 95% (with optional HDD), non-condensing		
Non-operating Environment	Temperature: -40°C to +70°C Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 95% (with optional HDD), non-condensing		
Operating Altitude (Maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)		
Non-operating Altitude (Maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)		
Noise	Maximum value < 72 DbA		

Specification

Performance and Capability

Performance and Capability	Eudemon1000E-F125	Eudemon1000E-F205
IPv4 Firewall Throughput ¹ (1518/512/64-byte, UDP)	160/160/80 Gbit/s	240/240/120 Gbit/s
IPv6 Firewall Throughput ¹ (1518/512/84-byte, UDP)	160/120/50 Gbit/s	240/200/75 Gbit/s
Firewall Throughput (Packet per Second)	120 M pps	180 M pps
Firewall Latency (64-byte, UDP)	35 μ s	35 μ s
FW + SA* Throughput ²	50Gbps	75Gbps
NGFW Throughput ³	36Gbps	54Gbps
NGFW Throughput(Enterprise Mix) ⁴	16Gbps	24Gbps
Threat Protection Throughput (Enterprise Mix) ⁵	14Gbps	21Gbps
Concurrent Sessions (HTTP1.1) ¹	50,000,000	75,000,000
New Sessions/Second (HTTP1.1) ¹	1,500,000	2,250,000
IPSec VPN Throughput ¹ (AES-256 + SHA256, 1420-byte)	45Gbit/s	65Gbit/s
Maximum IPSec VPN Tunnels (GW to GW)	40000	60000
Maximum IPSec VPN Tunnels (Client to GW)	40000	60000
SSL VPN Throughput ⁶	10 Gbit/s	12 Gbit/s
Concurrent SSL VPN Users (Default/Maximum)	100/10000	100/15000
Security Policies (Maximum)	60000	60000
Virtual Firewalls	1000	1000
URL Filtering: Categories	More than 130	
URL Filtering: URLs	Can access a database of over 120 million URLs in the cloud	
Automated Threat Feed and IPS Signature Updates	Yes, an industry-leading security center from Huawei (http://sec.huawei.com/sec/web/index.do)	
Centralized Management	Centralized configuration, logging, monitoring, and reporting is performed by Huawei SecoManager	
VLANs (Max)	4094	
VLANIF Interfaces (Max)	1000	
High Availability Configurations	Active/Active, Active/Standby	

Note:

1. Performance is tested under ideal conditions based on RFC2544, 3511. The actual result may vary with deployment environments.

2. SA performance is measured using 100 KB HTTP files.

3. NGFW throughput is measured with Firewall, SA, and IPS enabled; the performance is measured using 100 KB HTTP files.

4. NGFW throughput is measured with Firewall, SA, and IPS enabled; the performance is measured using the Enterprise Mix Traffic Model.

5. The threat protection throughput is measured with Firewall, SA, IPS, and AV enabled; the performance is measured using the Enterprise Mix Traffic Model.

6. SSL VPN throughput is measured using TLS v1.2 with AES128-SHA.

*SA: Service Awareness.

Hardware Specification

Hardware Specification	Eudemon1000E-F125	Eudemon1000E-F205
Dimensions (H x W x D) mm	43.6 x 442 x 600	
Form Factor/Height	1U	
Fixed Interface	2*100GE(QSFP28) + 2*40G(QSFP+)+ 8*25(ZSFP+) + 20*GE(SFP+) ¹	4*100GE(QSFP28) + 16*25GE(ZSFP+) + 8*GE(SFP+) ²
USB Port	1 x USB 3.0 ports	
Weight (Empty Configuration)	6.3 kg	
Local Storage	Optional, 1 * 2.5 inch 240G SSD storage, or 1 * 2.5 inch 1TB HDD storage	
Maximum Power Consumption	222W	
AC Power Supply	AC:100V to 240V, 50/60Hz DC: -48V to 60V	
Power Supplies	Dual AC or dual DC power supplies	
Operating Environment (Temperature/Humidity)	Temperature: 0°C to 45°C (without optional HDD); 5°C to 40°C (with optional HDD) Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 95% (with optional HDD), non-condensing	
Non-operating Environment	Temperature: -40°C to +70°C Humidity: 5% to 95% (without optional HDD), non-condensing; 5% to 95% (with optional HDD), non-condensing	
Operating Altitude (Maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)	
Non-operating Altitude (Maximum)	5,000 meters (without optional HDD); 3,000 meters (with optional HDD)	
Noise	Maximum value < 72 Dba	

Note:

1. Some 100GE interfaces and 25GE interfaces of Eudemon1000E-F125 are mutually exclusive.
2. Some 100GE interfaces and 25GE interfaces of Eudemon1000E-F205 are mutually exclusive.

Order Information

Product

Eudemon1000E-F15-AC	Eudemon1000E-F15 AC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 6*10GE SFP+, 1 AC power supply)
Eudemon1000E-F15-DC	Eudemon1000E-F15 DC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 6*10GE SFP+, 1 DC power supply)
Eudemon1000E-F25-AC	Eudemon1000E-F25 AC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 6*10GE SFP+, 1 AC power supply)
Eudemon1000E-F25-DC	Eudemon1000E-F25 DC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 6*10GE SFP+, 1 DC power supply)
Eudemon1000E-F35-AC	Eudemon1000E-F35 AC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 10*10GE SFP+, 2 AC power supply)
Eudemon1000E-F35-DC	Eudemon1000E-F35 DC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 10*10GE SFP+, 2 DC power supply)
Eudemon1000E-F55-AC	Eudemon1000E-F55 AC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 10*10GE SFP+, 2 AC power supply)
Eudemon1000E-F55-DC	Eudemon1000E-F55 DC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 10*10GE SFP+, 2 DC power supply)
Eudemon1000E-F85-AC	Eudemon1000E-F85 AC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 10*10GE SFP+, 2 AC power supply)
Eudemon1000E-F85-DC	Eudemon1000E-F85 DC Host (8*GE COMBO + 4*GE RJ45 + 4*GE SFP + 10*10GE SFP+, 2 DC power supply)
Eudemon1000E-F125-AC	Eudemon1000E-F125 AC Host (2*QSFP28 + 2*QSFP+ + 8*ZSFP+ + 20*SFP+, 2 AC power supplies)
Eudemon1000E-F125-DC	Eudemon1000E-F125 DC Host (2*QSFP28 + 2*QSFP+ + 8*ZSFP+ + 20*SFP+, 2 DC power supplies)
Eudemon1000E-F205-AC	Eudemon1000E-F205 AC Host (4*QSFP28 + 16*ZSFP+ + 8*SFP+, 2 AC power supplies)
Eudemon1000E-F205-DC	Eudemon1000E-F205 DC Host (4*QSFP28 + 16*ZSFP+ + 8*SFP+, 2 DC power supplies)

SSL VPN License

LIC-E1KF-SSLVPN-100	Quantity of SSL VPN Concurrent Users(100 Users)
LIC-E1KF-SSLVPN-200	Quantity of SSL VPN Concurrent Users(200 Users)
LIC-E1KF-SSLVPN-500	Quantity of SSL VPN Concurrent Users(500 Users)
LIC-E1KF-SSLVPN-1000	Quantity of SSL VPN Concurrent Users(1000 Users)
LIC-E1KF-SSLVPN-2000	Quantity of SSL VPN Concurrent Users(2000 Users)
LIC-E1KF-SSLVPN-5000	Quantity of SSL VPN Concurrent Users(5000 Users)

VSYS License

LIC-E1KF--VSYS-10	Quantity of Virtual Firewall (10 Vsys)
LIC-E1KF--VSYS-20	Quantity of Virtual Firewall (20 Vsys)
LIC-E1KF--VSYS-50	Quantity of Virtual Firewall (50 Vsys)
LIC-E1KF--VSYS-100	Quantity of Virtual Firewall (100 Vsys)
LIC-E1KF--VSYS-200	Quantity of Virtual Firewall (200 Vsys)
LIC-E1KF--VSYS-500	Quantity of Virtual Firewall (500 Vsys)
LIC-E1KF--VSYS-1000	Quantity of Virtual Firewall (1000 Vsys)

Threat Protection License

LIC-E1KE-Fxx-IPS-1Y	IPS Update Service Subscribe 12 Months
LIC-E1KE-Fxx-IPS-3Y	IPS Update Service Subscribe 36 Months
LIC-E1KE-Fxx-AV-1Y	AV Update Service Subscribe 12 Months
LIC-E1KE-Fxx-AV-3Y	AV Update Service Subscribe 36 Months
LIC-E1KE-Fxx-URL-1Y	URL Remote Query Service Subscribe 12 Months
LIC-E1KE-Fxx-URL-3Y	URL Remote Query Service Subscribe 36 Months
LIC-E1KE-Fxx-TP-1Y-OVS	Threat Protection Subscription 12 Months
LIC-E1KE-Fxx-TP-3Y-OVS	Threat Protection Subscription 36 Months
LIC-E1KE-F-CONTENT	Content Security Group Function

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