

# McAfee Network Security Platform

A uniquely intelligent approach to network security

## Key Advantages

### Unparalleled threat prevention

- Next-generation architecture
- Advanced botnet detection
- Behavior-based analysis

### Comprehensive malware protection

- Signature-less, advanced malware analysis
- Malware investigation dashboard
- Predictive malware detection via McAfee GTI

### Security Connected

- Real-time host context via McAfee ePO software
- McAfee GTI
- Integrated forensic analysis

### Performance and availability

- Up to 20 Gbps throughput
- Industry-leading reliability
- Active-active high availability

### Intelligent security management

- Scalable web-based management
- Intelligent alert prioritization
- Progressive disclosure workflows

### Visibility and control

- Application identification
- User identification
- Device identification

McAfee® Network Security Platform is a uniquely intelligent security solution that discovers and blocks sophisticated threats in the network. Using advanced threat detection techniques, it moves beyond mere pattern matching to defend against stealthy attacks with extreme accuracy, while its next-generation hardware platform scales to speeds of more than 20 Gbps with a single device to meet the needs of demanding networks. The Security Connected approach to security management streamlines security operations by combining real-time McAfee Global Threat Intelligence™ (McAfee GTI™) feeds with rich contextual data about users, devices, and applications for fast, accurate response to network-borne attacks.

## Protect Against Today's Stealthy Threats

Your network faces advanced, stealthy attacks that can evade traditional detection methods, leaving your network exposed to crippling breaches and downtime. Unfortunately, most organizations lack the financial and operational resources to implement and manage the combination of tools and technologies required to provide adequate defense.

McAfee Network Security Platform is an integrated network security solution that combines next-generation threat prevention with intuitive security management to improve detection accuracy and streamline security operations. It provides industry-leading coverage against malware, zero-day threats, denial-of-service attacks, and botnets.

## Unparalleled threat prevention

McAfee Network Security Platform is based on a next-generation inspection architecture designed to perform deep inspection of network traffic while maintaining line-rate speeds. It uses a combination of advanced inspection techniques—including full protocol analysis, threat reputation, behavior analysis, and advanced malware analysis to detect and prevent both known and zero-day attacks on the network.

## Comprehensive malware defense

No single malware detection technology can prevent all attacks, which is why McAfee Network Security Platform incorporates several advanced malware analysis techniques to prevent unwanted malware from wreaking havoc on your network. It combines file-reputation from McAfee GTI, deep file analysis with JavaScript detection, and an advanced anti-malware engine to detect zero-day threats, custom malware, and other stealthy attacks.

## Security Connected

Getting your hands on the data you need has never been easier. McAfee offers real-time integration with McAfee® ePolicy Orchestrator® (McAfee ePO™) software and McAfee Enterprise Security Manager for real-time correlation of network events across all relevant sources. Through integration with McAfee ePO software and McAfee Enterprise Security Manager, McAfee Network Security Platform, gets an accurate view of threats as they relate to devices and users and which ones present the greatest risk to the organization. The solution incorporates device details, user information, endpoint security posture, vulnerability assessments, and other rich information to help organizations understand threat severity and business risk factors.



#### **McAfee Network Security Platform Helps You:**

##### **Close security holes**

- Block malicious network activity
- Prevent stealthy attacks
- Detect advanced malware

##### **Reduce management headache**

- Automatically prioritize events
- Streamline investigative workflows
- Eliminate unnecessary tuning

##### **Adapt to the network**

- 1 GigE, 10 GigE connectivity
- Scale to 80 Gbps
- Active-active high availability

#### **Performance and scalability**

Get the best of both worlds—security and high performance. McAfee Network Security Platform combines a single-pass, protocol-based inspection architecture with purpose-built, carrier-class hardware to achieve real-world inspection of more than 20 Gbps in a single device. Its ultra-efficient architecture preserves performance regardless of security settings, while other IPS solutions can experience up to 50 percent reduction in throughput with “security over performance” policies.

#### **Visibility and control**

Make informed decisions about the applications and protocols on your network. McAfee Network Security Platform is the first and only IPS solution to combine advanced threat prevention and application awareness into a single security decision engine. We correlate threat activity with application usage, including layer 7 visibility of more than 1,500 applications and protocols, to allow you to make more informed decisions about which applications you allow on your network. In addition to application identification, McAfee Network Security Platform provides user and device visibility. It prioritizes risky hosts and users, including active botnets, through the identification of anomalous network behavior.

#### **Intelligent security management**

Make the most of your security investment through intelligent network security management. McAfee Network Security Manager offers scalable web-based management from two to several hundred network security appliances. It offers intuitive progressive disclosure workflows that guide administrators to relevant alerts as well as easy-to-use security dashboards that automatically prioritize events based on alert severity and relevancy. McAfee Network Security Platform integrates with McAfee ePO software to give your organization a consolidated view of risk and compliance across the entire enterprise, including up-to-the-minute assessments of at-risk infrastructure based on system vulnerabilities, network defenses, and endpoint security levels.

#### **Additional Features**

##### **Advanced intrusion prevention**

- IP defragmentation and TCP stream reassembly
- Anomaly detection
- McAfee, user-defined, and open-source signatures
- Host quarantine
- Advanced evasion protection
- Inspection of virtual environments

##### **Botnet protection**

- Heuristic bot detection
- Multi-attack correlation
- Command and control database

##### **DoS and DDoS prevention**

- Threshold and heuristic-based detection
- Host-based connection limiting
- Self-learning profile-based detection

##### **McAfee GTI**

- File reputation
- IP reputation
- Geo-location

##### **High availability**

- Active-active with stateful failover
- External fail-open (active)
- Built-in fail-open (for copper ports only)

##### **Protocol tunneling support**

- IPv6
- V4-in-V4, V4-in-V6, V6-in-V4, and V6-in-V6 tunnels
- MPLS
- GRE
- Q-in-Q Double VLAN

##### **McAfee Network Security Manager**

- Tiered management, up to 1,000 sensors
- User authentication (Radius, LDAP, and TACACS)
- Automated failover and fail-back
- Disaster recovery of critical configuration data
- Centralized, hierarchical policy management

## Network Security Platform Specifications

### 10 Gigabit Ethernet Connectivity



#### Sensor Hardware Components

##### Performance

	M-8000	M-6050	M-4050	M-3050	M-2950	M-2850	M-1450	M-1250
Real-World Throughput	10 Gbps	5 Gbps	3 Gbps	1.5 Gbps	1 Gbps	600 Mbps	200 Mbps	100 Mbps
Maximum Throughput (UDP 1512 Byte Packets)	Up to 20 Gbps	Up to 10 Gbps	Up to 4 Gbps	Up to 2.5 Gbps	Up to 1.5 Gbps	Up to 1 Gbps	Up to 300 Mbps	Up to 150 Mbps
Maximum Concurrent Connections	4,000,000	2,000,000	1,500,000	750,000	750,000	750,000	80,000	40,000
TCP Connections per Second	250,000	125,000	75,000	38,000	31,500	20,800	8,300	4,150
HTTP Connections per Second	120,000	60,000	36,000	18,000	15,000	10,000	4,000	2,000
Throughput with SSL Decryption (based on 10% SSL traffic)	8.8 Gbps	4.4 Gbps	2.7 Gbps	1.3 Gbps	900 Mbps	500 Mbps	N/A	N/A
Maximum SSL Flow Count	400,000	200,000	150,000	75,000	25,000	25,000	N/A	N/A
SSL Keys Imported	256	256	256	256	256	256	N/A	N/A
Typical Latency	Less than 100 µs	Less than 100 µs	Less than 100 µs	Less than 100 µs	Less than 100 µs	Less than 100 µs	Less than 100 µs	Less than 100 µs
Number of Virtual IPS Systems	1,000	1,000	1,000	1,000	100	100	32	16
Maximum DoS Profiles	5,000	5,000	5,000	5,000	5,000	300	120	100
ACL Rules	1,000	1,000	1,000	1,000	1,000	400	100	50

##### Ports

Fixed Gigabit Ethernet—Copper Ports (internal fail-open)	—	—	—	—	8	8	8	8
SFP Gigabit Ethernet Ports	16	8	8	8	12	12	—	—
10-Gigabit Ethernet	12	8	4	4	—	—	—	—
Dedicated Response Ports (RJ45)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)
Dedicated Management Ports (RJ45)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)	1 (10G / 1G / 100M)
Control Ports for External Fail-Open Kits	14	8	6	6	6	6	—	—

##### Physical

Dimensions	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each	2 X 2RU Rack Mountable 16.75 (W) x 3.05 (H) x 30.00 (D) each
Weight	94 lbs. (2 x 47 lbs.)	47 lbs.	47 lbs.	47 lbs.	40 lbs.	40 lbs.	12 lbs.	12 lbs.
Maximum Power Consumption	900w (2 x 450w)	450w	450w	450w	450w	450w	120w	120w
DC Power Available	Optional	Optional	Optional	Optional	Optional	Optional	N/A	N/A
Redundant Power Supply	Optional	Optional	Optional	Optional	Optional	Optional / N/A	N/A	N/A

Power	100–240VAC (50 / 60Hz)							
Temperature	0° to 35° C (Operating) –40° to 70° C (Non-operating)				0° to 40° C (Operating) –40° to 70° C (Non-operating)			

Relative Humidity (Non-condensing)	Operational: 10% to 90% Non-operational: 5% to 95%							
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Altitude	0 to 10,000 Feet							
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Safety Certification	UL 1950, CSA-C22.2 No. 950, EN-60950, IEC 950, EN 60825, IEC 60825, 21CFR1040 CB license and report covering all national country deviations.							
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EMI Certification	FCC Part 15, Class A (CFR 47) (USA), ICES-003 Class A (Canada), EN55022 Class A (Europe), CISPR22 Class A (International)							
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