

# ADS

## Anti-DDoS System

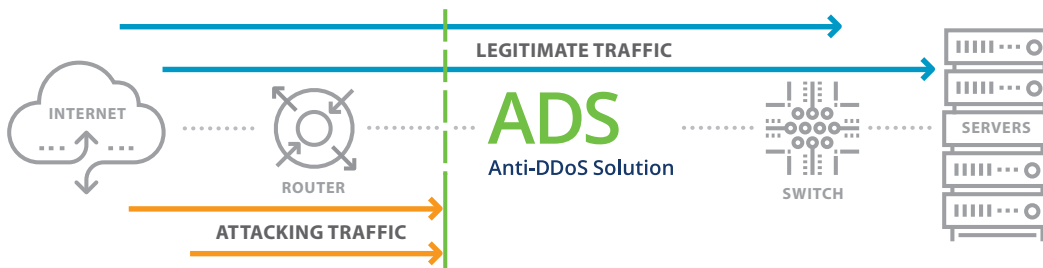
Today's DDoS attacks are more frequent, complex, and destructive than ever. They often result in loss of revenue, loss of customers, damage to brand, reduced availability of services, and theft of vital data. The NSFOCUS ADS provides comprehensive, multi-layered protection from today's advanced DDoS threats. The ADS includes technology powered by internationally-recognized research labs and developed with over 10 years of experience protecting the world's largest banks, telecommunications, gaming, and social media companies. It uses an innovative, multi-stage approach to monitor, detect, and mitigate the most complex DDoS attacks. This ensures only legitimate traffic reaches important network and application resources, protecting uptime and managing risks associated with DDoS.

### MONITOR

The ADS is easily deployed in any network and can scale to support hundreds of Gbps of inspected traffic. It monitors in real-time and supports the full suite of IP protocols necessary to ensure complete network visibility.

### DETECT

At the heart of the ADS is an innovative, multi-stage detection engine. All packets are subjected to a series of algorithms and other defense mechanisms to accurately identify malicious traffic. These include RFC Checks, Protocol Analysis, Access Control Lists, IP Reputation, Anti-spoofing, L4-L7 Algorithmic Analysis, User Behavior Analysis, Regular Expressions, and Connection/Rate Limiting. Together they provide industry-leading accuracy that protects against both known and zero-day threats. The detection engine is optimized frequently, so you always have the most accurate protection available.



### MITIGATE

Once malicious traffic has been identified by the ADS, it is removed, and the system forwards only legitimate traffic to its intended destination. Extensive reporting of DDoS attacks in real-time provides valuable information such as attack types, source/destination IPs, protocols, and more. An integrated web services API can also be used to assist with post-incident forensic analysis, compliance efforts, and automated configuration.

### PERFORMANCE. QUALITY. VALUE.

The ADS System is the ideal solution for today's advanced and evolving threats. Available in a range of cost and performance optimized appliances, they have been purpose-built to deliver high quality security for organizations of any size.

### NSFOCUS HYBRID DDoS DEFENSES

Many service providers and enterprises utilize a *hybrid approach* to defeat the damaging effects of DDoS attacks. This approach combines NSFOCUS On-Premises Defenses with the on-demand NSFOCUS Cloud DDoS Protection Service. Working in unison, the solution eliminates smaller/shorter attacks on-premises; while defending infrastructures against bandwidth saturating DDoS attacks using the NSFOCUS Cloud. Both defenses are fully integrated; resulting in increased bandwidth visibility, reduced cloud redirect times for mitigation, and coverage for all L3-L7 DDoS attack vectors.

### BENEFITS

**Alleviate concerns over loss of revenue, loss of customers, damage to brand, service availability and theft of vital data**

**Reduce operating expenses and free up valuable IT security personnel**

### KEY FEATURES

**Industry-leading Accuracy**

Filters malicious traffic to ensure only legitimate traffic reaches your infrastructure

**Best-in-Class Performance**

Provides advanced DDoS protection for any size organization

**Scalable Architecture**

In-line and out-of-path deployment options to meet the needs of any size environment

**Multi-Layered Security**

Network, application and web application security designed to respond to modern-day DDoS attacks

**SOFTWARE SPECIFICATIONS**

**DDoS Protection**

- Comprehensive, multi-layered protection against volumetric, application, and web application attacks
- Multi-protocol support and advanced inspection including TCP, UDP, HTTP, ICMP, NTP, DNS, SIP, fragments, flooding, connection exhaustion, header manipulation, and more
- Fully Integrated with NSFOCUS Cloud DDoS Defenses

**DDoS Protection and Mitigation Algorithms**

- RFC Checks, Protocol Analysis, Access Control Lists, IP Reputation, Anti-spoofing, L4-L7 Algorithmic Analysis, User Behavior Analysis, Regular Expressions, Fragmentation Controls, Connection and Rate Limiting
- Protect against both known and zero-day threats

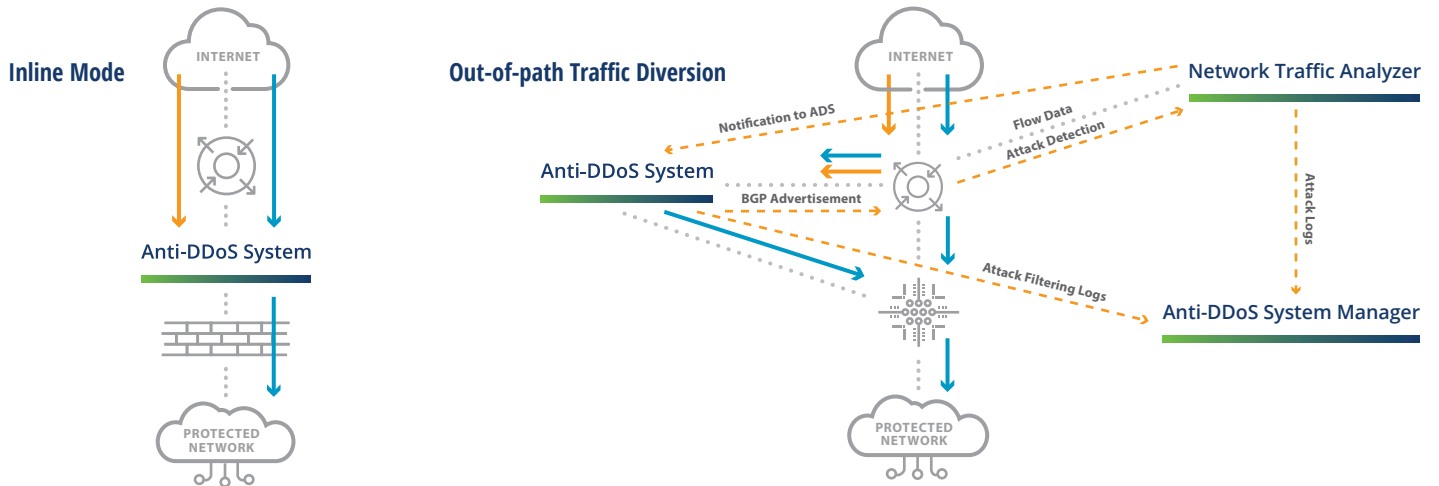
**Management**

- Protocols: HTTP, SNMP, Email, Syslog
- Authentication: Local database, Radius, TACACS+
- API: web services for reporting and automated configuration
- IP Protocols
- Addressing: IPv4/v6
- Routing: BGP, OSPF, RIP, IS-IS, static routing and PBR
- Data link and network layer: MPLS, GRE, VLAN (802.1q)

**Reporting**

- Real-time and historical reporting of attack types, source/destination IP
- Formatting: XML, PDF, HTML, and Microsoft Word
- Web services API for forensics and compliance initiatives

**DEPLOYMENT OPTIONS**



Hardware	ADS 8000	ADS 6025	ADS 4020	ADS 2020
<b>Mitigation Capacity</b>	40 Gbps   29,760,000 pps	20 Gbps   14,880,000 pps	10 Gbps   8,928,000 pps	4 Gbps   2,976,000 pps
<b>Interfaces</b>	Up to: 8*10GE SFP+  Or 4*10GE SFP+ and 16*GE port (copper, SFP-GE-SX, and SFP-GE-LX available)	Up to: 8*10GE SFP+  Or 32*GE port (copper, SFP-GE-SX, SFP-GE-LX and bypass module available)	Up to: 8*10GE SFP+  Or 32*GE port (copper, SFP-GE-SX, SFP-GE-LX and bypass module available)	Up to: 4*GE +4*SFP  Or 8*SFP (copper, SFP-GE-SX, SFP-GE-LX and bypass module available)
<b>Dimensions (WxDxH)</b>	24.7"x17.4"x3.5" 2 RU		22.6"x17"x3.5" 2 RU	
<b>Weight</b>	36.49 lbs (16.55 kg)		24.25 lbs (11 kg)	
<b>Environmental</b>	Operating: 41-104° F (5-40° C) Storage: 14-158° F (-10-70° C)		Operating: 32-104° F, (0-40° C) Storage: -4-176° F, (-20-80° C)	
<b>Power</b>	AC Dual Power Supply (450W total)		AC Dual Power Supply (350W total)	
<b>MTBF</b>	45,000 hours		60,000 hours	