



# Datasheet NG500

Ver.3.0.5

# POWERFUL & ROBUST NG-FW DESIGNED FOR MOST DEMANDING NETWORKS



### **NEXT-GEN APPLIANCE**

- Gigabit Interface
- Easy & User-Friendly GUI
- Zero Touch Provisioning (ZTP\*)

## THREAT MANAGEMNT

- Next-Gen Firewall
- Next-Gen Security: IDP/IDS/WAF
- Gateway Level AV & Anti-Spam
- Geo IP Fencing
- Web & Application Filter
- Malware Prevention
- Zero-day Protection (ZDP)
- SSL Inspection

#### PERSISTENT CONNECTIVITY

- Multi WAN Uplinks
- Load balancing & Link Aggregation
- Orchestrated SD-WAN Topologies (Hub & Spoke, Hub MESH, Branch MESH)
- Policy-based Routing (BGP, OSPF & Static Routes)
- Inbound Link Load Balancing (ILLB)
- High Availability (HA)
- Integrated LTE (USB and dongle LTE)
- Latency Mitigation (Intelligent path selection)

## PRODUCTIVITY ASSURANCE

- AAA | HotSPOT Gateway
- QoS | Bandwidth Mgmt.
- SD-WAN
- User & Guest Mgmt.
- Surfing & Threat Reporting
- Traffic Analyser
- On-Appliance Reporting & Monitoring

# **SECURE ACCESS**

- Secure SSL VPN (Client-Site & Site-Site)
- IPsec VPN
- Crypto VPN (Client-Site & Site-Site)





Specifically designed for most demanding Enterprise networks | Educational institutes that need a versatile solution to power and protect their networks. NetXGATE NG500 (All-In-One appliance) has been designed & engineered to combinedly serve the functionalities of Next-Gen Firewall, HotSPOT Gateway & SD-WAN.

It offer excellent performance, high-speed interfaces, and a choice of add-on connectivity modules. Whether your priority is ensuring maximum uptime for your SD-WAN links, securely connecting your remote users, or protecting your growing organization's network,

NetXGATE NG500 built in Hotspot Gateway functionalities that provide complete control on both wired and wireless network. Which helps to centrally manage their networks, avoid unauthorized access, enforce policies along with real-time lawful tracking & filtering with detailed in-built logs and reports on every configured features.

FEATURES	HARDWARE SPECIFICATIONS
No of Ethernet Interfaces (Fixed)	08 GbE
Expendable Slot (Optional)	Yes
Firewall Throughput <sup>†</sup>	22.0 Gbps
Concurrent Sessions	1,75,00,000
New Sessions / Sec.	1,90,000
VPN Throughput	3,000Mbps
NGFW Throughput	6,250 Mbps
AV Throughput	5,000 Mbps
IPS Throughput	6,500 Mbps
Type of Storage -SSD	128 ~256 GB
Memory / Max	8 / 16 GB
Firewall Policies	Unrestricted
Number of WAN Ports Supported	05 <sup>+</sup>
Maximum Connections	Unrestricted
Inbound NAT Connection	Unrestricted
Local User Database	Unlimited
Rated for Concurrent Users / Devices	500~600
Expendable Port Module (Optional)	SFP Fiber / GE Copper
Configurable WAN / DMZ / LAN Ports	Yes
IPv6 Ready from day 1	Yes

# **SPECIFICATIONS**

#### **NETWORK Services**

- Multi-Link Auto Failover.
   4G /5G Support: SIM\* | USB Dongle | Tethering
   Operating modes: NAT/route, transparent (bridge), and mixed mode
   Configurable LAN/WAN/DMZ Ports
   NAT & ALG Support DNAT, SNAT, PAT
   Routing Static, Source, Destination & Policy based
- based
- Policy Rule : predefined, custom & Grouping
- Authentication, Authorization & Accounting.
   Support Multicast Forwarding, VLAN Tagging
   Static, DHCP, PAP/CHAP Support

#### **NETWORK SECURITY**

- Stateful & Deep Packet Inspection Firewall Application Visibility & Control. Demilitarized Zone (DMZ)

- Demilitarized Zone (DMZ)
   Zone based access control list.
   Access scheduling
   Flooding detection and protection
   Stops all types of DoS; Prevents DNS Spoofing & Flooding, Bypass Websites, Packet Capturing
   IP-Mac bind, MAC Whitelist / Blacklist.
   Comprehensive DNS policy.
   Zero day Protection (ZDP).

### LINK LOAD BALANCING

- Bi-directional Link Load balancing Outbound link load balancing includes policy based routing and weighted, and dynamic detection
- Inbound Link load balancing supports Smart DNS
- Automatic link switching based on Traffic, latency, jitter, connectivity etc.

   Link health inspection with ARP, PING and DNS

#### **URL FILTERING**

- Web or URL / IP / Geography / Keyword / Port / Application Filter
- Block predefined categories on specific time
- Create | Edit | Delete Manual Categories & Add
- exception

  Manually defined web filtering based on URL, web content. Key word and MIME header

  Web filtering profile override: allows admin to temporarily assign different profiles to User/IP

  Additional web filtering features:

  Force Google Safe search

  Force educational YouTube

  Exempt scanning encrypted connections on certain categories for privacy

## USER | GUEST MANAGEMENT | AAA

- ■ID & Password login fixed users
- ■Approval-based Login.
- Social Media & OTP based login
- ■BYOD Self & Voucher Registration with OTP
- ■Create users with auto-expiry, Renew & Block
- Seamless connectivity from Wired to W-LAN
- Auto Login /No Authentication after First LoginAuto login based on IP & MAC or combination
- ■Concurrent logins, auto MAC binding
- Easy migration import/export data
- ■Restrictions based on Device & OS
- ■Create user groups & apply policies
- Allow login only when user comes from specific segments

### BANDWIDTH MANAGEMENT | OoS

- Define enhanced quality of service (QoS)
- Max/Guaranteed bandwidth tunnels or IP/User basis
- Bandwidth allocated by time, priority, or equal bandwidth sharing
- Restrict users based on data, b/w &time
  Individual and shared bandwidth quota
- Contention ratio based bandwidth allocation.
- Schedule based committed & burstable b/w.
   Configure multiple b/w policy on a user at different hours of day

- VPN | SD-WAN

  IPSec / SSL VPN Tunnelling with failover
  Encryption 3DES, AES-256
  Hash algorithms MD5, SHA1, SHA-512
  Authentication pre-shared key, certificates
- Supports IKEv1 and IKEv2

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  DH groups 1, 2, 5, 14, 15, 16...

  NAT traversal & PFS support

  SSL authentication AD, LDAP, radius, local

  Multi-layer client authentication certificate,

  Username/password, MAC address, OTP\*\*

  Network access Split and Full tunnelling

  Granular access control to all network resources.

- Administrative controls session timeout, DPD User and group policy enforcement
- Multicast support over SSL VPN Secure SSL -VPN deployment modes: Client-to-site, Site-to-Site.
- View and manage IPSec and SSL VPN connections Supports Secure SSL VPN clients that run Windows, Linux, iOS & Android.

## **CAPTIVE PORTAL CAPABILITIES**

- Intuitive self-service portals for users. Customise captive form input fields

- Mobile/desktop responsive login page
  Social media based login, mac based auto login
  Create hourly and day based plans with FUP
  Accounting based on hours, days, data transfer.

#### **INTRUSION PREVENTION**

- Protocol anomaly detection, rate-based detection, custom signatures, manual, automatic push or pull signature updates, integrated threat encyclopaedia
- IPS Actions: default, monitor, block, reset (attackers IP or victim IP, incoming interface) with expiry time
- IDS sniffer mode
- Predefined prevention configuration

### **ANTI-VIRUS & ADVANCE THREAT PROTECTION**

- Virus, Worms, Trojan detection & removal Spyware, Malware, Phishing, Bot & Pharming protection
- Manual, automatic push or pull signature updates Scans HTTP/S, FTP, SMTP/S, POP3, IMAP Block files based on their type.
- Threat logs with action.
- Compressed file virus scanning Spam filtering

#### ATTACK DEFENCE

- Abnormal protocol attack defence Anti DoS / DDoS, including SYN Flood, UDP Flood, DNS Query Flood defence, TCP fragment, ICMP fragment etc.
- ARP attack defence

# DATA LEAKAGE PREVENTION

- Restricts file upload over HTTP, FTP, P2P and other file sharing applications.
- Blocks file transfer (upload & Download) over IM like Facebook, Whats-app & other Social Sites .

  Controls file upload /download over HTTPS/SSL
- Logging & Reporting in accordance to HIPAA, CIPA compliance.

- SYSTEM MANAGEMENT

  System Configuration Backup / Restore
  Auto/ Manual backup of User & Threat Logs
  Enable appliance & PMS remote access
  Set auto/manual firmware updates

- Create Child Admins and check logs Set NTP , SMTP Email

- Three levels of users: Admin | Operator | Monitor Dynamic real-time dashboard status and drill-in monitoring widgets

# LOGS | REPORTING | MONITERING

- Real-time traffic statistic and analytics User Management & Account Expiry Report Bandwidth ,Data usages & Session Report

- Web Browsing & Records surfing logs of each user Search logs based on User, IP, Site, Time & File Type Change Log Report / Activity Timeline Comprehensive event logs: system & admin activity audits, routing & networking, VPN, User authentications
- User & System based overall and user wise analytics

- Real Time monitoring Tools to get visibility into network Traffic & Bandwidth consumption.

  On-Appliance (Local) Logging and reporting facilities Reports can be exported in PDF, Word and via Email System information such as concurrent session, CPU, Memory and temperature.
- Support traffic information collection and forwarding via Net-flow.

### **ALERT MANAGEMENT**

- Real-time alerts to user on data consumption limit, voucher expiry etc.
- Real-time alerts to admin on link failure & Speed, Remote Access etc.
- Schedule Alerts for specific reports

# **SMS GATEWAY**

- Pre-configured SMS gateway\*\*
- Click-n-configure custom gateway
   Facilitates different message templates

#### **VULNERABILITY ASSESSMENT**

- Scans LAN Devices for vulnerability
- Generates summary and detailed reports of found possible threats

# **CUSTOM DEVELOPMENT**

- Personalized development on request
- Third party application Integration

# **HIGH AVAILABILITY**

- Active-Passive with state synchronizationsStateful Failover to Keep-Alive Sessions
- Redundant heartbeat interfaces

- **HARDWARE**
- Form factor- 1U Rack Mountable
  Memory 8 GB
  SSD 128~256 GB
- GbE Ports 08
- Connectivity Modules SFP / GbE (Optional) 2 USB Ports, 1 VGA, 1HDMI
- Dimension-(mm)-(H x W x D)- 44 x360 x 270
- Weight- 5.0 Kg

- POWER AND RELIABILITY
- 100-240V AC, 3 6A@50-60 Hz. Power Consumption - 80 W/180 BTU/hr(idle)
- 200 W/685 BTU/hr (max)
  Operating Temperature (0°C ~ 40°C)
  Storage Temperature (-20°C ~+70°C)

Relative humidity - 10% - 90%, no condensing

- **COMPLIANCE**
- Regulatory Compliance UL, RoHS, CE, FCC Privacy and Compliance- CIPA, HIPPA

# All specification and photos are subject to change without prior notice. \* Optional (may charge extra for SIM module) \*\* Optional -Need to Purchase SMS gateway

1. Maximum throughput performance is measured under ideal test conditions using industry standard performance test tools. 2. Firewall UDP throughput performance is based on RFC 2544 guidelines. 3. All Performance values are up-to or rough guideline only and vary depending on system configuration. 4. IPS throughput (http) measured using default IPS rule set and 512KB object size. 5. VPN throughput measured using multiple tunnels with 512KB response size. 6. Testing done with flows through multiple port pairs. +if all slot populated 7. Expandable Ports Module needs to be procured additionally and at a time only one Expandable Ports Module can be procured

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