

# Network Service Edge

## NSE Quick Look

- Unified threat management
- SD-WAN Edge
- Network services: RADIUS, DHCP, DNS
- Remote connectivity: VPN with MFA
- Cloud-managed with cnMaestro™



### Overview

Cambium Networks' Network Service Edge (NSE) delivers unified threat management and SD-WAN for small and medium enterprises, educational institutions, and other distributed organizations.

- NSE 3000 features two Gigabit WAN ports and four Gigabit LAN ports and offers reliable connectivity with WAN throughput of up to 1 Gbps.
- NSE 4000 features eight 2.5 GbE Ethernet ports and two 10 GbE SFP+ ports with secure throughput of 2.5 Gbps and Layer-3 firewall throughput of 10 Gbps.



### Unified Threat Management

- With a single click, enable intrusion detection or intrusion prevention and let the industry-leading IDS/IPS engine protect your network against threats.
- Create advanced firewall Layer-3 and application-based rules to protect your network. Use geo-based IP filters to deny or allow traffic to/from specific countries.
- Audit security vulnerabilities with always-on LAN vulnerability scans and get notified when critical ones are discovered.
- Filter malware and undesired content with the DNS content filter. Select options to block from over 88+ categories of domain names.
  - This helps you enforce CIPA guidelines for K–12 education deployments.
- Create secure tunnels between multiple sites or connect securely to a central site with site-to-site VPN.

## Network Service Edge (NSE)

### SD-WAN and Traffic Engineering:

- Set up WAN links to share traffic or configure them in an active-backup fashion.
- Share traffic on both WAN links and specify the traffic share.
- Tracks WAN link health and automatically fails over traffic to the performing link.
- Prioritize business-critical applications and restrict bandwidth for non-critical apps.
- Easily prioritize and allot reserved bandwidth for time-sensitive voice applications.

### Auto VPN, Site-to-Site, and Remote Access VPN

- Auto-VPN: Effortlessly create secure tunnels between multiple sites or connect tens of remote sites to a central hub with just a couple of clicks.
- Enable remote workers to log in to your network securely from any device. NSE supports industry standard WireGuard, L2TP-IPSec, and IKEv2-EAP protocols for remote access VPN.
- Turn on multi-factor authentication to enhance password-based authentication. Offers MFA via Google Authenticator.

### Analytics

- Get a comprehensive overview and security analysis of all the devices on your network via Cambium's cnMaestro cloud management platform.
- Use the intrusion prevention dashboard to gain insight on intrusion attempts. Use the insight to refine prevention policy and enhance intrusion rule sets.
- Get a network security audit of all devices on your network. Patch and remediation measures are provided to help you secure your devices
- Get deep insight into all the application traffic on your network. Use the insight to craft granular policies to prioritize and allocate sufficient bandwidth to business-critical apps.

### Network Services

- Create separate networks for employees, guests, and IoT devices with ease. Our VLAN and DHCP configuration make this setup a breeze.
- Enable traffic shaping and rate-limiting policies to cap internet bandwidth for guests.
- Use the on-box RADIUS server to create user accounts and set up secure network authentication for all the users and devices on your network.
- NSE supports Dynamic DNS updates for WAN interfaces. Create easy-to-remember host names to expose on-premise services.
- NSE keeps all databases current and always updated— intrusion rules, vulnerability reports, device signatures, Geo-IP databases, malware sites database.

### Cloud Management

- NSEs are completely managed by the easy-to-use, secure, and cloud-hosted Cambium Networks cnMaestro Network Management system. A single-pane-of-glass management system to operate and manage all Cambium enterprise products (NSE, Enterprise Wi-Fi, and cnMatrix switches).
- NSEs can work without a subscription and include strong built-in security features. A subscription adds advanced security and additional features.
- Zero-touch provisioning: Power on the device and have it automatically managed and configured.
- Gain complete visibility and control of your Starlink WAN link with alignment guidance, performance insights, and remote management through cnMaestro.
- Insight and stats on all connected devices on your network.
- Easy to consume data on intrusion attempts—severity, details, country of origin, and remedial measures.
- Network security audit of all devices on your network: Patch and remediation measures are provided to help you secure your devices.

## Network Service Edge (NSE)

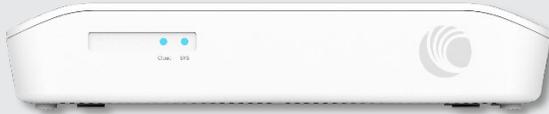
Specifications	NSE 3000	NSE 4000
<b>Recommended Use Case</b>	Sites and branches with up to 1,000 devices	Sites, branches, and headquarters with up to 2,500 devices
<b>Routed Throughput</b> (Layer 3 forwarding throughput)	945 Mbps*	10 Gbps*
<b>Layer-7 Stateful Throughput</b> Advanced firewall throughput (NAT + AVC)	917 Mbps*	6.5 Gbps*
<b>Advanced Security Throughput</b> (NAT + AVC + IPS + ACL)	911 Mbps*	3.2 Gbps*
<b>Site-to-Site VPN</b>	100 site-to-site VPN tunnels	250 site-to-site VPN tunnels
<b>WAN Ports</b>	2 x 1 Gbps RJ45/SFP	1 x 10 GbE SFP+, 1 x 2.5 GbE RJ45 (reconfigurable up to 5 WAN ports)
<b>LAN Ports</b>	4 x 1 Gbps RJ45	1 x 10 GbE SFP+, 7 x 2.5 GbE RJ45 (reconfigurable)
<b>PoE+ Ports</b>	NA	P7/P8/P9/P10 RJ45 ports
<b>Mounting</b>	Tabletop and wall-mount options	Tabletop and Rackmount options (Brackets included)
<b>Dimension</b>	232.72 mm x 175.16 mm x 43 mm	330 mm x 230 mm x 44 mm
<b>Weight</b>	0.65 kg	3.24 kg
<b>Max Power Consumption</b>	22.8W	156W (POE Included), 36W (POE Excluded)
<b>Power Supply</b>	40W DC	100-240 V AC, 50-60Hz
<b>LEDs</b>	Cloud connection and system indicators	Cloud connection, WAN status and system indicators
<b>Operating Temperature</b>	0°C–40°C	0°C–40°C

\*Throughput values are "up to" and may vary depending on system configuration.

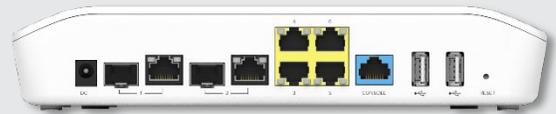
### Network Service Edge (NSE)

#### NSE 3000

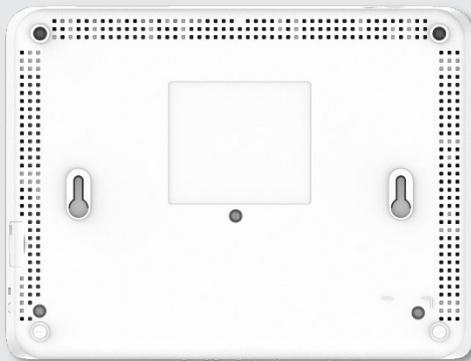
Front



Back/Ports



Bottom



Side Panel



#### NSE 4000

Front/Ports



Back



Panel



## Network Service Edge (NSE)

### Security and Security Plus Feature Set

Security (No Subscription)	Security Plus (Available with a 1-, 3-, or 5-Year Subscription)
SD-WAN <ul style="list-style-type: none"> <li>WAN load balancing (Active-Active and Active-Backup)</li> <li>Flow preferences (Layer3 and Layer 7)</li> <li>Traffic shaping</li> <li>Failover policies</li> </ul>	All of Security plus...
Site-to-site VPNs (hub and spoke and mesh) <ul style="list-style-type: none"> <li>IKEv1</li> <li>IKEv2</li> </ul>	Geo-IP firewall <ul style="list-style-type: none"> <li>LAN to WAN</li> <li>WAN to LAN</li> </ul>
Remote VPN <ul style="list-style-type: none"> <li>LTTP-IPSec</li> <li>IKEv2</li> <li>WireGuard</li> </ul>	DNS content filtering <ul style="list-style-type: none"> <li>80+ categories</li> <li>Safe search</li> <li>Fast with data caches around the world</li> </ul>
Next-Gen Firewall <ul style="list-style-type: none"> <li>Layer3 (IP-based)</li> <li>Layer7 (application-based)</li> </ul>	LAN vulnerability assessment
Intrusion detection and prevention <ul style="list-style-type: none"> <li>Choice of free and commercial rule sets</li> </ul>	High availability <ul style="list-style-type: none"> <li>1+1 in Active-Backup mode</li> </ul>
Application visibility and control <ul style="list-style-type: none"> <li>RADIUS</li> </ul>	Auto VPN <ul style="list-style-type: none"> <li>One-click setup of VPN tunnels</li> <li>IoT device identification</li> </ul>
Cloud managed via cnMaestro Essentials	cnMaestro reports and analytics Cloud managed via cnMaestro Essentials and cnMaestro X

## Network Service Edge (NSE)

### NSE 3000 and cnMaestro Ordering Information

Part Number	Description
NSE3000	NSE3000 Security and SD-WAN Appliance with 1 Gbps Firewall Throughput and 920 Mbps Advanced Security Throughput
NSE-SUB-3000-1	NSE subscription for one NSE3000. Creates 1 Device Tier30 slot in cnMaestro X or cnMaestro Essentials. Includes Cambium Care Pro software support. 1-year subscription.
NSE-SUB-3000-3	NSE subscription for one NSE3000. Creates 1 Device Tier30 slot in cnMaestro X or cnMaestro Essentials. Includes Cambium Care Pro software support. 3-year subscription.
NSE-SUB-3000-5	NSE subscription for one NSE3000. Creates 1 Device Tier30 slot in cnMaestro X or cnMaestro Essentials. Includes Cambium Care Pro software support. 5-year subscription.

### Extended Warranty Ordering Information

The standard warranty for NSE3000 is 1 year with an option to buy extended warranty for up to 4 years.

EW-E1NSE3000-WW	NSE3000 extended warranty, 1 additional year.
EW-E2NSE3000-WW	NSE3000 extended warranty, 2 additional years.
EW-E3NSE3000-WW	NSE3000 extended warranty, 3 additional years.
EW-E4NSE3000-WW	NSE3000 extended warranty, 4 additional years.

### Cambium Care Advanced Add-On Ordering Information

CCADV-UPG-NSE3000-1	Cambium Care Advanced Add-On to cnMaestro: 1 year of support for 1 NSE3000. 24x7 TAC support, software updates, and NBDS advance replacement for HW.
CCADV-UPG-NSE3000-3	Cambium Care Advanced Add-On to cnMaestro: 3 years of support for 1 NSE3000. 24x7 TAC support, software updates, and NBDS advance replacement for HW.
CCADV-UPG-NSE3000-5	Cambium Care Advanced Add-On to cnMaestro: 5 years of support for 1 NSE3000. 24x7 TAC support, software updates, and NBDS advance replacement for HW.

## NSE4000 Ordering Information

### NSE 3000 and cnMaestro Ordering Information

Part Number	Description
NSE4000	NSE4000 Security and SD-WAN Appliance with 10 Gbps Firewall Throughput and 2.5 Gbps Advanced Security Throughput
NSE-SUB-4000-1	NSE subscription for one NSE4000. Creates 1 Device Tier31 slot in cnMaestro X or cnMaestro Essentials. Includes Cambium Care Pro software support. 1-year subscription.
NSE-SUB-4000-3	NSE subscription for one NSE4000. Creates 1 Device Tier31 slot in cnMaestro X or cnMaestro Essentials. Includes Cambium Care Pro software support. 3-year subscription.
NSE-SUB-4000-5	NSE subscription for one NSE4000. Creates 1 Device Tier31 slot in cnMaestro X or cnMaestro Essentials. Includes Cambium Care Pro software support. 5-year subscription.

### Extended Warranty Ordering Information

The standard warranty for NSE4000 is 1 year with an option to buy extended warranty for up to 4 years.

EW-NSE4000-1	NSE4000 extended warranty, 1 additional year.
EW-NSE4000-2	NSE4000 extended warranty, 2 additional years.
EW-NSE4000-3	NSE4000 extended warranty, 3 additional years.
EW-NSE4000-4	NSE4000 extended warranty, 4 additional years.

### Cambium Care Advanced Add-On Ordering Information

CCADV-UPG-NSE4000-1	Cambium Care Advanced Add-On to cnMaestro: 1 year of support for 1 NSE4000. 24x7 TAC support, software updates, and NBDS advance replacement for HW.
CCADV-UPG-NSE4000-3	Cambium Care Advanced Add-On to cnMaestro: 3 years of support for 1 NSE4000. 24x7 TAC support, software updates, and NBDS advance replacement for HW.
CCADV-UPG-NSE4000-5	Cambium Care Advanced Add-On to cnMaestro: 5 years of support for 1 NSE4000. 24x7 TAC support, software updates, and NBDS advance replacement for HW.

#### ABOUT CAMBIUM NETWORKS

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences and device connectivity with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

[cambiumnetworks.com](http://cambiumnetworks.com)