

Secure Edge Node Technical Compliance Register: corporate network VPN gateway remote workforce

SECURE EDGE NODE TECHNICAL COMPLIANCE REGISTER: CORPORATE NETWORK VPN GATEWAY REMOTE WORKFORCE

EXECUTIVE SUMMARY

This document serves as the definitive Technical Compliance Register for the SecureEdge 7000 Series VPN Gateway, a purpose-built hardware platform engineered to secure and accelerate corporate network access for the modern remote workforce. As enterprises transition to permanent hybrid work models, the demand for robust, high-performance, and compliant VPN termination points has intensified. The SecureEdge 7000 Series directly addresses this need by providing carrier-grade security, line-rate encryption, and seamless integration into existing network infrastructures. This register details the platform's architecture, hardware specifications, compliance certifications, and ordering information, establishing it as the benchmark for secure remote access solutions.



ARCHITECTURE & CHASSIS DESIGN

The SecureEdge 7000 Series is architected around a modular, high-density chassis available in 1RU and 2RU form factors, tailored for both branch office and data center deployments. The foundation of the system is a high-speed, non-blocking backplane that delivers up to 1.6 Tbps of switching capacity, ensuring that all VPN traffic is processed at wire speed without performance degradation. The chassis is designed for front-to-back airflow, optimizing cooling efficiency in standard 19-inch racks.

HARDWARE FEATURES

- ****Dedicated Security Processors****: The platform leverages a purpose-built security ASIC that offloads all cryptographic operations from the main CPU.

This includes AES-NI, SHA-2, and ECC acceleration, enabling line-rate IPsec and SSL/TLS encryption with near-zero CPU utilization.

- **High-Availability Architecture**: Redundant, hot-swappable power supplies (1+1 or 2+2) and field-replaceable fan trays ensure maximum uptime. The system supports active/standby and active/active high-availability (HA) clusters for stateful session failover.
- **Interface Flexibility**: A comprehensive set of network interfaces includes 1GbE, 10GbE, and 40GbE SFP/SFP+/QSFP+ ports, providing the bandwidth necessary to aggregate thousands of concurrent remote connections.
- **Zero-Touch Provisioning (ZTP)**: Simplifies large-scale deployments by automating the initial configuration and onboarding process, reducing operational overhead for IT teams.

COMPLIANCE & STANDARDS

This section forms the core of the compliance register, detailing the extensive suite of certifications the SecureEdge 7000 Series adheres to. These certifications ensure the platform meets rigorous global standards for security, interoperability, and environmental safety.

- **Cryptographic Compliance**: FIPS 140-3 Level 2 (Pending Validation), Common Criteria (CC) EAL4+ for VPN gateways, and NSA Suite A/B

Cryptography for government-grade deployments.

- **Network Protocol Standards**: Full interoperability with IETF standards including IPsec (RFC 4301, 4303, 4309), TLS 1.3 (RFC 8446), IKEv2 (RFC 7296), and L2TP, ensuring seamless integration with third-party endpoints and cloud services.
- **Security Compliance**: ISO 27001 certified manufacturing and development processes, NIST SP 800-53 control mapping, and GDPR-ready logging and data anonymization features.
- **Environmental & Safety**: UL 60950-1 / IEC 62368-1 for safety, FCC Part 15 Class A, CE marking, and RoHS/REACH compliance. The platform is also certified to NEBS GR-63-CORE Level 3 and GR-1089-CORE for deployment in central office environments.

TECHNICAL SPECIFICATIONS

| Parameter | Specification |
|--------------------|---|
| Form Factor | 1RU / 2RU Chassis (19-inch rack-mountable) |
| Switching Capacity | Up to 1.6 Tbps (non-blocking backplane) |
| Power Supply | Dual Hot-Swappable AC/DC (1+1 or 2+2 Redundant) |

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|------------------------|--|
| Throughput (Encrypted) | Up to 40 Gbps IPsec AES-256-GCM |
| Concurrent Tunnels | Up to 20,000 (IPsec) / 30,000 (SSL/TLS) |
| Port Configuration | 1GbE, 10GbE (SFP+), 40GbE (QSFP+) |
| Security Processors | Dedicated cryptographic ASIC (AES-NI, SHA-2, ECC) |
| High Availability | Active/Standby, Active/Active (Stateful Sync) |

ORDERING OPTIONS

The SecureEdge 7000 Series is available in multiple performance tiers and configurations to match diverse enterprise requirements.

- **SecureEdge 7200 (1RU)**: Entry-level model supporting up to 5 Gbps of encrypted throughput, ideal for small to medium branch offices. Includes 4x 1GbE and 2x 10GbE ports.
- **SecureEdge 7400 (1RU)**: Mid-range model supporting up to 15 Gbps of encrypted throughput, suitable for large branch offices and regional headquarters. Includes 8x 1GbE and 4x 10GbE ports.
- **SecureEdge 7800 (2RU)**: High-end model supporting up to 40 Gbps of encrypted throughput, designed for data centers and service provider POPs.

Includes 16x 10GbE and 4x 40GbE ports.

All models support field-upgradeable memory, storage, and expansion modules. A comprehensive selection of software licensing tiers unlocks advanced features such as application visibility, next-generation firewall (NGFW) services, and advanced threat protection (ATP). For a complete list of SKUs, accessory kits, and software licenses, please consult the official SecureEdge 7000 Series Price List and Ordering Guide.

