

ENCRYPTAGUARD LLC: STRATEGIC INFRASTRUCTURE & MANAGED EDGE SECURITY

Founder & Lead Architect: Tanner Sutherlin

Document Classification: Technical Whitepaper v1.5 (January 2026)

Executive Summary

In an increasingly complex threat environment, small and medium-sized enterprises (SMEs) are frequently compromised due to a reliance on consumer-grade ISP equipment. Standard configurations often lack the robust partitioning required to protect critical assets—such as Point-of-Sale (POS) systems and confidential client data—from higher-risk traffic. **EncryptaGuard LLC** provides a "Drop-In" Managed Edge Gateway that integrates a hardened, hardware-based security layer into existing infrastructure.

Our architecture prioritizes **Physical Network Segregation** and **On-Premise Edge Processing** to deliver a secure, high-performance network environment with zero data sovereignty compromise.

Core Security Framework

EncryptaGuard LLC establishes a standardized security posture through three foundational pillars.

1. Hardened Network Segregation

We implement a **Dual-Sided Isolation Architecture**, positioning our gateway as a dedicated intermediary between the ISP Modem and the Internal Access Point. This ensures that external-facing traffic is physically and logically partitioned from the core business network, effectively preventing lateral movement and securing the internal environment against unauthorized access.

2. Traffic Optimization & Telemetry Suppression

By neutralizing background telemetry, trackers, and malicious scripts at the gateway level, we reclaim significant bandwidth for production-critical applications. This centralized policy enforcement allows VoIP services and cloud-based POS systems to operate on clean, high-priority paths, often resulting in a perceivable browsing speed increase of up to 3x.

3. Proactive Resilience & Lifecycle Management

Modern network defense requires continuous adaptation. Our managed nodes utilize 24/7 health monitoring and automated, "Zero-Touch" security patching. This ensures that every deployment remains resilient against emerging global vulnerabilities without requiring manual intervention or specialized IT staff on-site.

Technical Specifications & Architecture

High-Performance Edge Computing

To maintain absolute data privacy, all security processing occurs locally at the **Network Edge** on industrial-grade **Protectli Vault** hardware. Unlike traditional cloud-based filters that introduce latency and route sensitive metadata through third-party servers, EncryptaGuard ensures that all filtering decisions are made on-premise.

Zero-Trust Remote Management

Fleet integrity is maintained via **Outbound-Only Encrypted Tunnels**. By utilizing a WireGuard-based mesh architecture, the internal network remains entirely invisible to the public internet, as no inbound ports are ever opened on the primary firewall.

Operational Standards

- **Hardware:** Fanless, solid-state industrial appliances with dedicated multi-core processing.
 - **Data Integrity:** All DNS requests are encapsulated via **DNS-over-HTTPS (DoH)** to prevent ISP-level snooping.
 - **Privacy:** On-premise processing ensures zero-logging of internal browsing behavior by external entities.
-

Strategic Consultation

EncryptaGuard LLC provides a sophisticated defense-in-depth solution for businesses that prioritize uptime, speed, and privacy.

Contact for Technical Assessment: Visit www.encryptaguard.com or connect with our engineering team via [LinkedIn](#) for a strategic consultation regarding your unique network environment.

Secure Your Edge with EncryptaGuard LLC *Hardened Architecture. Enterprise-Grade Isolation. Professionally Managed.*