

# EtherStream VPN™

## Quantum-Secured Virtual Network Infrastructure



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*"Beyond encryption: The secure fabric for the distributed enterprise"*

# Product Overview

EtherStream VPN redefines secure connectivity for the Web3 era, transcending traditional virtual private networks with quantum-resistant encryption, AI-driven threat prevention, and zero-trust architecture. Our cloud-native solution ensures encrypted, ultra-secure connections for remote workers, multi-cloud environments, and distributed organizational infrastructure.

## Key Features



### Quantum-Ready Security

- Post-quantum cryptographic algorithms resistant to quantum attacks
- Quantum key distribution compatibility for unbreakable encryption
- Forward secrecy protocols ensuring long-term data protection
- Zero-knowledge proofs for authentication without credential exposure



### AI-Driven Threat Prevention

- Real-time traffic analysis with behavior-based anomaly detection
- Predictive threat intelligence with autonomous countermeasures
- Deception technology with honeypot integration
- ML-powered phishing and social engineering protection



### Zero-Trust Framework

- Continuous identity verification and device attestation
- Least-privilege access control with dynamic permission adjustment
- Micro-segmentation for granular network isolation
- Application-level security with deep packet inspection



### Performance Optimization

- Smart routing with latency-based path selection
- Bandwidth aggregation across multiple connections
- Traffic prioritization based on application criticality
- Compression and deduplication for efficient data transfer

## Technical Specifications

Feature	Specification
Encryption	AES-256, ChaCha20-Poly1305, Post-Quantum algorithms
Authentication	Multi-factor, biometric, hardware token, FIDO2
Protocols	WireGuard, OpenVPN, IPsec, proprietary Vapor Protocol
Throughput	Up to 40 Gbps per gateway instance
Client Support	Windows, macOS, Linux, iOS, Android, ChromeOS
Deployment Models	Cloud, on-premise, hybrid, multi-cloud
Scalability	Unlimited users with elastic infrastructure
Management	Cloud console, API, CLI, Infrastructure as Code

# Deployment Scenarios

## Global Workforce Security

Create a secure, performant network fabric for remote and hybrid workers across the globe, ensuring consistent security posture regardless of location or device.

## Multi-Cloud Security Mesh

Establish encrypted tunnels between cloud environments, on-premise data centers, and edge locations with unified policy enforcement and centralized visibility.

## Zero-Trust Application Access

Replace legacy VPN architectures with application-specific access, eliminating network-level access and reducing the attack surface.

## Secure Partner Ecosystem

Extend secure connectivity to partners, contractors, and third-party vendors with granular access controls and complete audit trails.

# ROI Impact

- **76%** reduction in security incidents related to remote access
- **42%** decrease in bandwidth costs through intelligent routing
- **89%** faster deployment of secure connectivity for new locations
- **64%** reduction in help desk tickets related to connectivity issues

# EtherStream Security Dashboard

The intuitive security dashboard provides unprecedented visibility into your secure network:

- **Threat Intelligence Map** - Global visualization of active threats and countermeasures
- **User Risk Scoring** - AI-calculated risk levels for individual users and devices

- **Autonomous Response Log** - Transparent tracking of security automation actions
- **Compliance Posture** - Real-time assessment of regulatory compliance status

## Compliance & Certification

- EU AI Act Compliant
- SOC2 Type II Certified
- ISO 27001 Certified
- GDPR Compliant
- HIPAA Compliant
- FedRAMP Ready