



Q-VPN

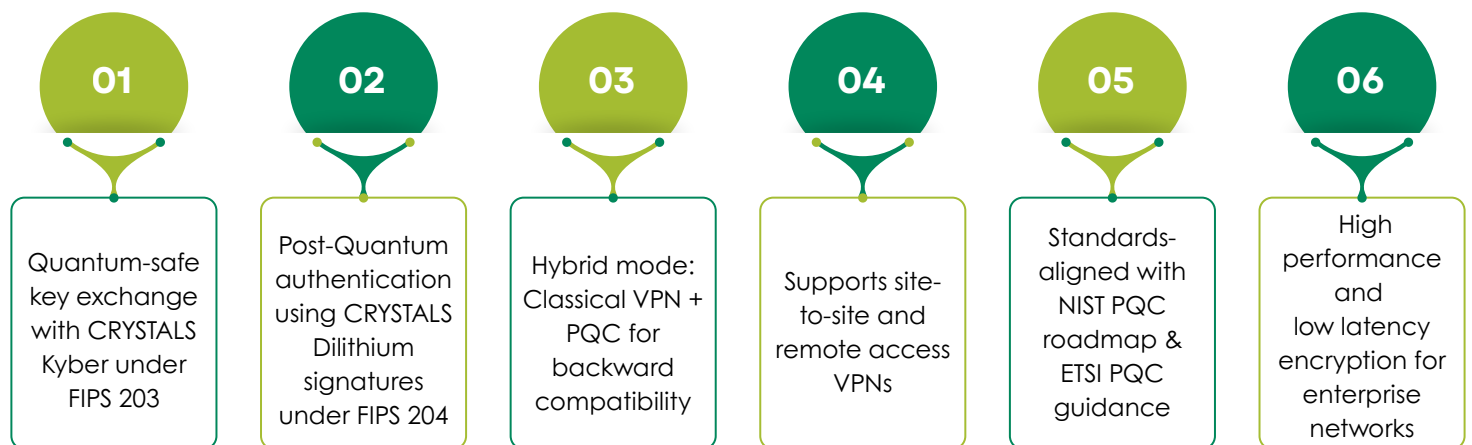
Seamless, Secure, and Future-proof

Quantum-Resistant VPN ensure secure, future-proof connectivity for remote users and site-to-site networks. Leveraging NIST standards compliant Post-Quantum Cryptography (PQC) alongside classical algorithms, these VPNs protect data today and against future quantum threats. Indigenously developed and standards aligned, the solution provides a hybrid cryptography approach, ensuring smooth migration to quantum-safe communications without disrupting existing VPN infrastructure. Ideal for government, defense, telecom, financial services, and critical infrastructure, where long-term data confidentiality and regulatory compliance are essential.

Why Quantum-Resistant VPN?

Classical VPNs are vulnerable to future quantum attacks, exposing sensitive data. Our hybrid PQC approach ensures long-term confidentiality, compliance, and smooth transition to quantum-safe networks without disrupting existing VPN operations.

Key Highlights



Use Cases



Quantum VPN

Specifications	
Product Description	Enterprise-grade VPN delivering future-proof post-quantum cryptography
Encryption Model	Hybrid Encryption (Classical + Post-Quantum Cryptography)
Post-Quantum Key Exchange	CRYSTALS-Kyber under FIPS 203 (NIST-selected)
Classical Key Exchange	ECDHE / RSA
Post-Quantum Digital Signatures	CRYSTALS-Dilithium (NIST-selected)
Classical Signature Fallback	RSA / ECDSA
Symmetric Encryption	AES-256-GCM
Hash Algorithms	SHA-256 / SHA-384 / SHA-3
Quantum Threat Mitigation	Protection against Harvest-Now, Decrypt-Later attacks
VPN Types Supported	Remote Access VPN, Mobile VPN, Site-to-Site VPN
VPN Tunnel Type	Quantum-Resistant VPN Tunnel
Transport Protocols	TLS 1.2, TLS 1.3 (PQC-ready)
Handshake Mechanism	Hybrid TLS (Classical + PQC)
Backward Compatibility	Fully interoperable with existing VPN clients and gateways
Performance Impact	Optimized hybrid cryptography with minimal latency
Mobile Platforms	iOS, Android
Mobile Client Type	Native Mobile VPN Application
Always-On VPN	Supported (policy-controlled)
PKI Integration	X.509 certificates compliant
Deployment Models	On-premises, Private Cloud, Hybrid Cloud
High Availability	Active-Active / Active-Passive
Post-Quantum Standards	NIST PQC (CRYSTALS-Kyber FIPS 203, CRYSTALS-Dilithium FIPS 204)
Transport Security Standards	TLS 1.3 compliant



Stay Connected



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