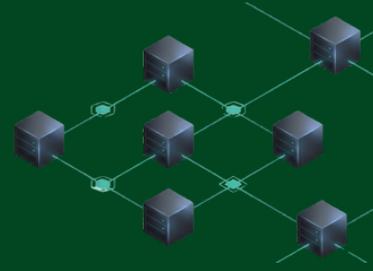




Q-Courier



Q-Courier is a Quantum-Resistant Web & Mail Server that protect web and email communications from current and future quantum threats. By combining NIST standards compliant Post-Quantum Cryptography (PQC) with classical algorithms, these servers deliver hybrid security that ensures confidentiality, integrity, and authentication. Q-Courier remains fully compatible with existing networks and clients. Indigenously developed and the standards-aligned, the solution provides a future-proof approach to secure HTTPS and S/MIME email communications, making it ideal for government, defense, telecom, and critical infrastructure.

WHY Q-COURIER?



Traditional TLS and S/MIME rely solely on classical algorithms, which are vulnerable to future quantum attacks. Our hybrid PQC solution ensures long-term confidentiality and authentication while allowing a smooth, compatible migration to quantum-safe communications.

KEY HIGHLIGHTS



01

Quantum-safe
TLS for web
servers



02

S/MIME email
encryption with
post-quantum
signatures



03

Hybrid
cryptography
(Classical + PQC)
ensures backward
compatibility



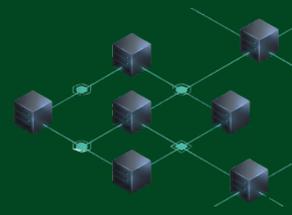
04

High performance
and low-latency
for enterprise
workloads



05

Fully aligned
with NIST PQC
roadmap & ETSI
PQC standards



Specification Summary

Specification Area	Details
Services	HTTPS, S/MIME Email
Cryptography	Hybrid (Classical + Post-Quantum)
Classical Algorithms	RSA, ECC
PQC Algorithms	CRYSTALS-Kyber (Key Exchange), CRYSTALS-Dilithium (Signatures)
Hash Algorithms	SHA-256, SHA-384, SHA-512
TLS Support	TLS 1.2 / TLS 1.3 (PQC-ready)
Certificate Standard	X.509 v3 (for S/MIME)
Authentication	Certificate-based (S/MIME)
Backward Compatibility	Fully compatible with existing clients
Performance	Optimized for low latency and high throughput
Deployment Models	On-Premises, Private Cloud, Hybrid
Compliance Alignment	NIST PQC roadmap, ETSI PQC standards

DESIGNED BEYOND TODAY'S QUANTUM THREATS



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