

CLOUD VPN APPLIANCE

ENX12

Post-quantum VPN.
Programmable hardware.
Your AWS environment.

FOR AMAZON EC2 F2

Conceptual FPGA illustration

PQ-IPsec / PQ-WireGuard / AEAD / UAPI

12.5 Gbps

PRODUCT CAPACITY TARGET

1 FPGA

SINGLE ACCELERATOR

AMI + AFI

DELIVERY MODEL

A cloud entry point for post-quantum migration

ENX12 brings ENQUANTUM's programmable cryptographic architecture to Amazon EC2 F2. Designed for mid-size VPN gateway replacement and remote access evaluation, it pairs server software with FPGA acceleration in the customer's AWS environment.

HARDWARE ACCELERATION

Cryptographic processing in programmable logic.

CRYPTOGRAPHIC AGILITY

A path to update algorithms through FPGA reconfiguration.

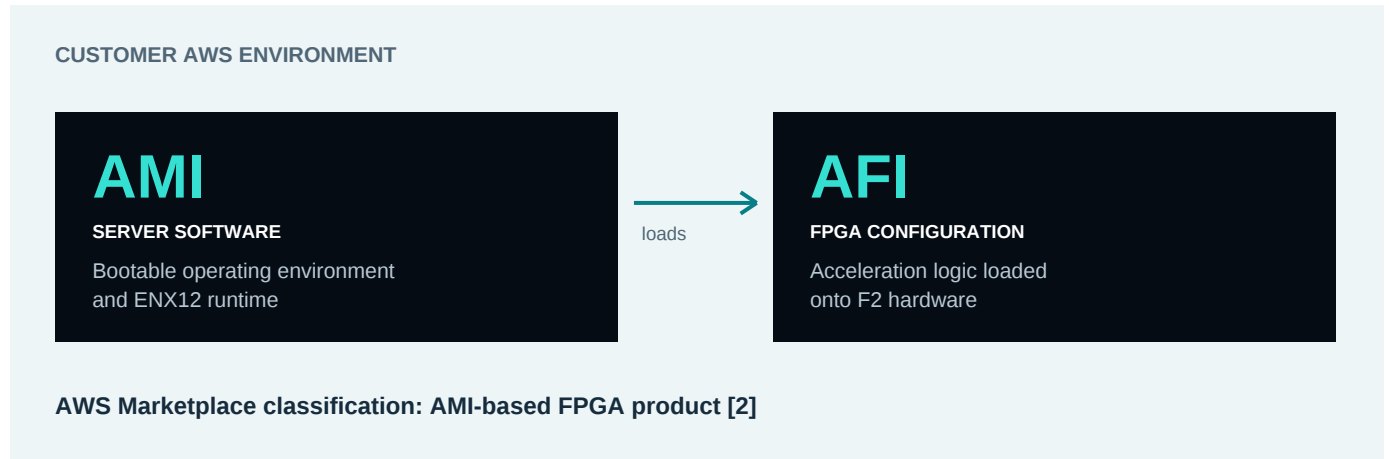
CLOUD DEPLOYMENT

An AMI-based FPGA product for AWS Marketplace.

Initial release planned for H2 2026. Capacity is a product target, not a verified encrypted-throughput benchmark. [1]

Software and silicon

One appliance delivered through two complementary images.



Platform profile

INSTANCE

Intended mapping: f2.6xlarge

COMPUTE

24 vCPUs / 256 GiB memory

ACCELERATOR

1 AMD Virtex UltraScale+ HBM FPGA

NETWORK

12.5 Gbps EC2 network bandwidth

SIZING

~2,500 remote users, planning estimate

Sizing depends on traffic and concurrency. EC2 bandwidth does not establish encrypted throughput. FIPS 140-3 validation and ENQ-KDB remain roadmap activities. [1, 3]

Security architecture

Hybrid key exchange

The ENQ256 v3 design combines ML-KEM-768 with ECDH, illustrated with X25519. [1]

PQ VPN & authenticated encryption

PQ-IPsec and PQ-WireGuard compatible. AEAD protects traffic confidentiality and integrity. Confirm supported peers and PQ profiles.

Operator & enterprise integration

UAPI compatible with industry-standard IPsec and WireGuard VPN management APIs for VPN operators and enterprise customers.

Evaluate ENX12

Request release specifications, a compatible peer matrix and performance results for your traffic profile. Hourly and annual software subscriptions are planned; AWS infrastructure charges are separate. [1]

CONTACT

info@enquantum.io

enquantum.io

[1] ENQUANTUM Systems Technical Deck, September 2026, slides 7, 11, 15 and 17–22.

[2] AWS Marketplace Seller Guide: Understanding AMI-based products, FPGA Products.

[3] AWS Amazon EC2 F2 instance specifications. AWS sources checked September 10, 2026.