

ENTERPRISE POST-QUANTUM VPN APPLIANCE

ENX-B800

Post-quantum readiness.
Built into the network.

Dell PowerEdge R6715
Programmable AMD Versal acceleration

**DELL POWEREDGE R6715**

Dell base-platform photo; conceptual backdrop. Final configuration may differ.

PQ-IPsec / PQ-WireGuard / AEAD / UAPI**800 Gbps**

AGGREGATE CAPACITY TARGET

1U

PLANNED RACK FOOTPRINT

2 FPGA

PLANNED ACCELERATORS

Migration capacity for demanding networks

ENX-B800 is designed to bring hardware-accelerated post-quantum VPN processing to enterprise gateways and regional network hubs. Its planned two-card architecture pairs flexible Ethernet rates with a programmable cryptographic datapath, helping teams evolve security without treating every algorithm change as a hardware replacement.

ADAPT

Firmware-based cryptographic evolution.

CONSOLIDATE

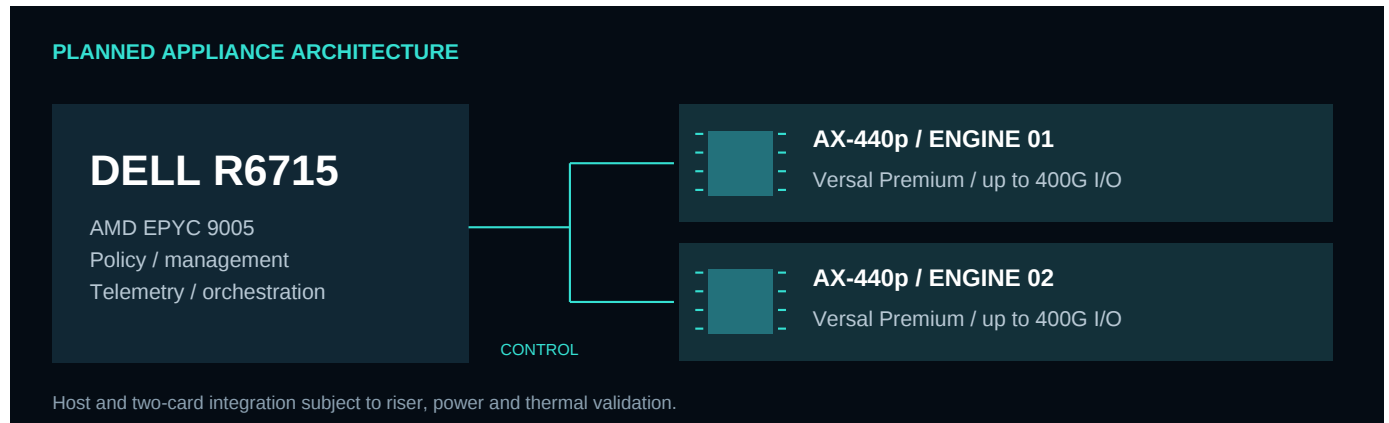
A compact gateway for mixed-speed estates.

PREPARE

Evaluate reconnection load as well as throughput.

Designed for the next transition

Planned configuration and evaluation priorities



Platform profile

PLANNED HOST

Dell PowerEdge R6715, 1U; single AMD EPYC 9005 processor. [1]

ACCELERATION

2 x BittWare AX-440p; AMD Versal Premium VP1202. [2, 3]

NETWORK OPTIONS

Per card: 1 x 400G, 2 x 200G, 4 x 100G or 8 x 50G. [2]

MEMORY / HOST LINK

Up to 32 GB DDR4/card; dual PCIe Gen5 x8. [2]

Security & deployment

Hybrid PQC evaluation

The B800 study models X25519 + ML-KEM-768 key establishment, ML-DSA-65 authentication and AES-256-GCM AEAD traffic protection. [4]

PQ VPN & authenticated encryption

PQ-IPsec and PQ-WireGuard compatible. AEAD protects traffic confidentiality and integrity. Supported peers and PQ profiles require release-specific validation.

Operator & enterprise integration

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

VALIDATION BEFORE PRODUCTION

800 Gbps is an aggregate design target, not measured encrypted throughput. The earlier study's handshake and recovery figures are modeled, not R6715 test results. Final port map, card availability, cryptographic profiles and certification status must be confirmed.

Plan your B800 evaluation

Request availability, integration details and a traffic-profile assessment.

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[1] Dell R6715 Technical Guide; product image: Dell.com. [2] BittWare AX-440p datasheet.
[3] ENX-B Product Briefs / Platform Study r3, July 2026; host revised to R6715 for this brief.
[4] ENX-B800 Solution Study ENX-SS-2601, July 2026. Specifications preliminary.