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Connection Protection Detection

VENA & VECTA - Brief Technical Spec

VENA and VECTA Edge Hardware Devices are ATOMNIA's universal CPE (uCPE) edge appliances for the OMNIA solution. They run SD-WAN, SASE, encryption and OMNIA Cyber Command (OMNIA CCP) services on a single lean, green device.

Area	Technical specification
uCPE platform	Segmented virtual network functions (VNFs) enable SD-WAN, security and Layer 2, 3 and 4 encryption services to run simultaneously on the same appliance.
OMNIA services	Supports SD-WAN, SASE/Zero Trust access, data assurance encryption, remote access, OMNIA CCP, SD-WAN Cloud and secure IoT connectivity as VNFs.
Form factors	Available as desktop or 1U rack-mounted appliances, in single or high-availability configurations. Both ranges are offered in three performance tiers for small branches, standard sites and higher-throughput locations.
Wireless and mobile resilience	Integrated Wi-Fi capability supports local wireless edge requirements. A SIM slot provides 4G/LTE failover when primary underlay links fail.
Power options	A 12 V DC power input option enables operation during power outages, during load-shedding on in remote areas where power is not available.
Global service	Available for delivery, installation, management and support in 190 countries.

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Area	Technical specification
VENA role	Virtual Edge Network Appliance optimised for SD-WAN and SASE access deployments at branches and smaller sites. Hosts VNFs including SD-WAN, router, firewall and deep packet inspection.
VENA hardware	Fixed desktop form factor, with an optional rack-mount kit for 19-inch racks. Intel x86, multi-core architecture supports concurrent SD-WAN, security and encryption functions.
VENA connectivity	Multiple 1 GbE Ethernet interfaces for WAN and LAN roles; exact port maps vary across the three VENA models. Wi-Fi and an optional SIM slot for 4G failover are supported.
VECTA role	Virtual Edge Core Termination Appliance for higher-throughput sites, hubs and core-edge access deployments. Hosts SD-WAN, routing, firewall, deep packet inspection and other VNFs in demanding environments.
VECTA hardware	1RU rack-mount appliance for data centres, PoPs, regional hubs and large branches. Uses Intel processors optimised for networking, with higher core count and network-optimised architecture for multi-gig throughput and high VNF density.
VECTA resilience	Redundant 1+1 power supply and support for high-availability deployments, including active/standby or clustered configurations as required in OMNIA designs.
VECTA connectivity	Up to 14 physical network connections, with 1 GbE and 10 GbE interfaces for multiple WAN underlays and high-speed LAN/uplink connections. Supports integration of a 20-port usable switch into the chassis.

Deployment and Consumption

VENA is a compact device designed for businesses that require the scalable or the full OMNIA stack. VECTA is designed for headquarters, data centres, aggregation hubs and large campus sites requiring higher port density and performance.

Both appliances can be consumed as-a-Service, removing upfront hardware Capex and aligning costs with Opex and PAYG subscription models.

Operational Benefits

- Consolidates network, security and Layer 2, 3 and 4 data encryption functions on one device, avoiding stacks of separate appliances.
- Reduces hardware count, capital hardware investment, ongoing device-management overhead and power usage.
- Supports a consistent OMNIA experience and policy enforcement from small VENA branch deployments to large VECTA hub environments.
- Helps reduce power consumption and CO2 footprint in support of CSR and sustainability goals.