PacketViper Launches Cyber-Physical Compute Edge Platform to Secure Every Critical Infrastructure Edge

New platform delivers compute resources, monitoring, and cyber-physical protection in a single, autonomous system designed for modern smart infrastructure.

PITTSBURGH, PA, UNITED STATES, December 5, 2025 /EINPresswire.com/ -- PacketViper today announced the release of its Cyber-Physical Compute Edge, a unified platform delivering autonomous, preemptive cybersecurity and local compute capabilities to the most distributed, vulnerable, and hard-to-protect infrastructure environments. Built directly into PacketViper's core security fabric, the platform extends real-time detection, Active Deception, and threat containment to every edge location-including traffic systems, industrial sites, utilities, building automation, IT closets, and remote field assets.

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> Critical infrastructure risks are expanding. PacketViper's preemptive cyber enables operators to fuse deception, automated containment, and physical-environment sensing into a single edge platform."
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> *Francesco Trama, PacketViper CEO*

The launch addresses a growing infrastructure gap: most operational and public-sector systems now rely on connected devices at the edge, yet these sites typically lack compute resources, monitoring, or cyber-physical protection. PacketViper Compute Edge provides all three in a single, integrated solution, eliminating the cost and complexity of deploying individual security stacks for each environment.

"Compute Edge represents the next evolution of preemptive cyber-physical defense," said Francesco Trama, CEO. "Critical infrastructure is expanding, and so are the risks. By fusing deception, automated containment, and physical-environment sensing into a single edge platform, PacketViper is giving operators the ability to secure the places that traditional IT tools simply cannot reach."

PacketViper Compute Edge solves a core challenge facing enterprises, cities, and critical

infrastructure operators: how to secure and operate hundreds or thousands of distributed edge sites with no local security or compute capability.

The platform enables organizations to deploy the same advanced PacketViper security fabric used in data centers-now packaged into a lightweight, autonomous edge system that operates reliably even in low-bandwidth, air-gapped, or unmanaged environments. Key capabilities include:

Cyber-Physical Correlation: Each unit combines environmental sensors-such as motion and tamper detection-with network-level monitoring to identify hybrid attacks, including unauthorized physical access paired with abnormal command activity.

Inline, Real-Time Containment: The platform blocks unauthorized commands, lateral movement, and malicious traffic at wire speed-without depending on firewalls, centralized systems, or cloud connectivity.

Active Deception & Automated Moving Target Defense: PacketViper's deception technology and Automated Moving Target Defense obscure the attack surface, divert adversaries to decoys, and continuously shift communication pathways to disrupt reconnaissance.

Distributed, Autonomous Operation: Remote Security Units operate independently inside field cabinets, substations, buildings, and intersections-even when disconnected from central management-enforcing Zero Trust policies locally.

Embedded Compute for Local Applications: PacketViper Compute Edge hosts analytics, monitoring tools, or AI-driven operational logic directly at the edge, eliminating the need for dedicated servers or backhaul dependencies.

Purpose-Built for Modern Smart Infrastructure: From intelligent transportation systems to utilities, industrial operations, and smart buildings, the platform brings a consistent, unified security architecture to environments historically left unprotected.

Traffic Control & Smart Mobility: Traffic cabinets remain one of the weakest points in modern ITS networks. Compute Edge provides local cyber-physical monitoring, inline containment, and deception directly inside cabinets-addressing emerging traffic-system vulnerabilities.

Industrial & Utility Sites: In pump stations, substations, well pads, and other remote OT locations, Compute Edge delivers preemptive defense where no compute infrastructure previously existed-supporting autonomous threat isolation and ruggedized edge protection.

Building Automation, IT Closets & Data Centers: The platform extends visibility and enforcement into HVAC systems, access control networks, remote IT closets, colocation environments, and data center edge nodes-preventing unauthorized commands or lateral movement.

PacketViper Compute Edge strengthens security while delivering cost-efficient operational benefits:
Enhanced Public & Operational Safety: Prevents malicious traffic manipulation, unsafe process commands, or unauthorized physical access.

Operational Continuity: Autonomous enforcement ensures systems remain secure during outages or network disruptions.

Security Stack Life Extension: Reduces load on firewalls, IDS/IPS, and other security tools by eliminating unnecessary and malicious traffic at the edge.

Compliance Alignment: Supports the security and monitoring requirements established by leading regulatory and critical infrastructure guidelines.

About PacketViper: PacketViper delivers preemptive cyber-physical security designed for OT, smart infrastructure, and distributed critical environments. Its patented security technologies protect organizations worldwide from modern cyber-physical threats. For more information, visit www.packetviper.com.

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