Datasheet

EdgeIPS LE 102

Industrial Next-Generation Intelligent Protection System

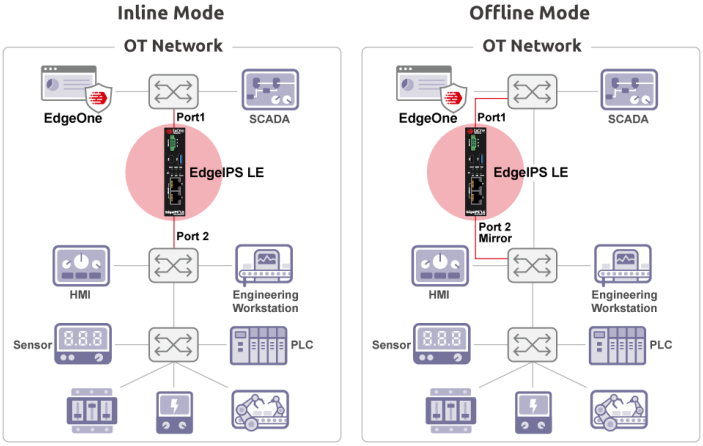
Safeguarding the Future of Industry: OT Network Security Solutions for Uninterrupted Operation

As we enter the era of Industry 4.0, the integration of Operational Technology (OT) into manufacturing and industrial production is revolutionizing the industry. However, this advancement also brings an increase in sophisticated cyber threats such as ransomware, supply chain attacks, and critical infrastructure targeting. To combat these threats, TXOne has developed a comprehensive suite of OT security solutions, meticulously designed in respond to the complex needs of today's production environments.

Selecting the right security solution is essential to any effective cybersecurity strategy. TXOne offers a diverse range of Edge security solutions, tailored to the specific requirements and operational contexts of each industrial vertical. This ensures that every industry can deploy an optimal solution for its unique environment.

In OT security, protecting operations without disrupting production is critical. TXOne's Edge devices provide robust protection while ensuring uninterrupted business continuity. These devices integrate seamlessly into existing networks, eliminating the need for downtime, and in the rare event of hardware failure, they are equipped with multiple bypass mechanisms to maintain smooth production network traffic.

Comprehensive protection is the cornerstone for security, and TXOne leads the industry with advanced features designed to defend against evolving threats. By integrating SageOne, our Cyber-Physical Systems protection platform, OT security operators can correlate network security intelligence with data from other sources, gaining enhanced visibility into their overall security posture. This empowers them to respond more efficiently and effectively to cyber incidents and potential security risks.



Solution Overview

Building a reliable OT network with ease involves three key elements. First, ensuring a strong feature-environment fit is crucial for seamless hardware **adoption**. Second, all security features are designed with a primary focus on **operational** efficiency and continuity. Lastly, OT-specific insights play a pivotal role in enhancing **prevention** capabilities, addressing gaps often overlooked by general IT security products.

You can find your Edge for all sorts of environments —whether harsh or temperate, centralized or distributed. Our flexible connection types and available port density options ensure that your specific needs are met. The pioneering fail-safe mechanisms and AI-driven deployment strategies reduce the configure-to-service time, ensuring a seamless, uninterrupted end-to-end flow. Combined with our OT-centric, proactive prevention technologies, TXOne makes resilient networking both practical and effective. With rising cybersecurity threats, robust OT security is crucial. TXOne Edge products offer innovative Network-wide Security Situational Awareness, providing real-time threat detection and response across the entire OT environment.

Core Capabilities

Adoption

Fulfilling Technical and Operational Demands with a Swift Onboarding Flow

- Commercial form factor for less-demanding environments.
- Compact size for space-constrained production sites.
- Easy on-site installation for rapid deployment.
- Batch setup supported with Deployment Assistant.

Operation

Activating Protection Painlessly with No Operational Disruption

- Ensures uninterrupted production by supporting fail-safe mechanisms during hardware failures.
- Automatically creates and deploys security policies based on AI-curated traffic behaviors.
- Integrates seamlessly into existing networks without disrupting operations.

Prevention

Crafting a Resilient Network with Operational Insights

- Enhances network segmentation to contain cyber infections and limit lateral movement.
- Protects unpatched production assets with signature-based virtual patching.
- Extends IT to OT network protection by importing suspicious objects from third parties.

Key Features

Asset-Centric Auto Rule Learning Technology

EdgeIPS LE 102 features Asset-Centric Auto Rule Learning Technology, an AI-driven solution tailored to the ICS network environment. This advanced technology analyzes traffic for each asset, generating baseline allowlists that can be reviewed individually, streamlining administration and boosting security management.

Signature-Based Virtual Patching

Through virtual patching, your network gains a powerful, up-to-date first line of defense against known threats. This gives users enhanced control over the patching process, enabling a proactive defense against potential incidents while offering added protection for legacy systems.

OT-Aware Operational Intelligence

Our core technology for EdgeIPS LE 102, TXOne One-Pass DPI for Industry (TXODI), gives you the ability to create and edit allowlists, enabling interoperability between key nodes and deep analysis of L2-L7 network traffic.

Unrivaled Threat Intelligence

Leveraging the Zero Day Initiative (ZDI) vulnerability rewards program, EdgeIPS LE 102 provides your systems with unparalleled protection against undisclosed and zero-day threats.

Transparent Network Traffic Control

EdgeIPS LE 102, specifically designed for levels 1-3, can be deployed in front of mission-critical assets or at the OT network edge. Its transparency and high performance enable it to safeguard network traffic and production assets without disrupting operations.

Flexible Operation Modes

EdgeIPS LE 102 can flexibly switch between 'Monitor' and 'Prevention' modes. Keep in 'Monitor' mode until the detection results are verified by the IT or OT team, then switch to 'Prevention' mode to block malicious traffic.

Shadow OT Visibility Enhancement

EdgeIPS LE 102 is designed to seamlessly integrate and coordinate your IT and OT networks while providing visibility into your shadow OT environment with detailed insights into asset communication, leaving no blind spots and no room for compromise.

Holistic CPS Protection Platform Integration

By integrating TXOne SageOne with Edge security solutions, you can orchestrate cybersecurity information across all Edge Series devices. This integration goes beyond visibility, offering comprehensive protection and threat detection across all CPS facilities in your organization. It offers actionable recommendations ready for implementation by OT security management teams.

Centralized Management with Convenient, Consolidated Overview

Pattern updates and firmware management can all be centralized on a large scale. For facilities with extensive EdgeIPS LE 102 nodes, EdgeOne facilitates group administration and management, thereby reducing costs and enhancing efficiency on a large scale.

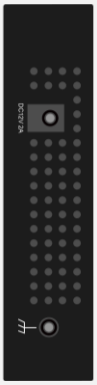
EdgeIPS LE 102 Hardware

EdgeIPS LE 102

110 mm x 109 mm x 26 mm (4.33 in x 4.29 in x 1.02 in)

Front Panel

Rear Panel



EdgeIPS LE 102 Specifications

Feature	EdgeIPS LE 102
Threat Prevention Throughput*	100Mbps at least (IMIX) / 600Mbps (UDP 1518 bytes)
Latency*	<500 microseconds on average under mixed traffic condition
Concurrent Connection (TCP)	30,000
Policy Enforcement Rules	512 device rules / 512 EdgeOne rules
IT Protocol Filter Profiles	64 profiles
Form Factor	DIN-rail mounting and wall mounting (with optional kit)
Weight (Standalone Device)	490 g (1.0802 lb)
Dimensions (W x D x H)	110 mm x 109 mm x 26 mm (4.33 in x 4.29 in x 1.02 in)
Network Interface Type	2 x auto-sensing 10/100/1000 Mbps ports (RJ45 connector)
USB Interface	1 x USB v3.0 Type-A
Management Interface (Web Console)	With shared uplink port
Hardware Failover	Hardware bypass (Fail-Open)
Management Console Interface	USB Type-C console
Input Voltage	12- 48 VDC
Input Current	0.483/0.241/0.127 A
Power Supply	2 types of power input (3-pin terminal block, G, V+, V-, 12-48V DC) and standard 12V DC power adapter
Operating Temperature	0 to 40 ˚C (32 to 104 °F)
Ambient Relative Humidity	5 to 95% non-condensing
Non-Operating / Storage Temperature	-40 to 85 ˚C (-40 to 185 °F)
Non-Operating / Storage Relative Humidity	5 to 95% non-condensing
Vibration	IEC60068-2-6 (without any USB devices attached)
Mean Time Between Failure (MTBF)	135,000 hours (under 25 ˚C)
Certification	CE, FCC (Part 15B Class A), VCCI (Class A) UL (UL 62368-1, UL 60950-1) CISPR 32, EN 55032/35
Green Product	RoHS, RoHS2, CRoHS, WEEE
Centralized Management Console	Supports EdgeOne

* Note: Performance and latency are measured in a laboratory; these values may vary according to test conditions and system configuration.
* Each EdgeIPS LE is entitled to 2 years of hardware warranty. Upon renewal of the software license, the hardware warranty WILL NOT be extended for the same renewal period, subject to a maximum warranty period of 5 years for the hardware.