GARLAND
TECHNOLOGY
See every bit, byte, and packet®

+

txOne
networks

Simplify Your OT Cybersecurity Stack
A joint solution from TXOne Networks and Garland Technology

Cyber criminals are smart. They run their operations as a business driven by profits. They often target companies with poor security protections first because they are the easiest targets. Unfortunately, there's plenty of easy targets out there. Companies need to shift their mindset from 'It won't happen to us, why would we be a target,' to 'When will it happen to us?' It can seem overwhelming and difficult to know where and when to begin on your OT cybersecurity journey. But the good news is there are simple, scalable and impactful steps you can take today to get started.

TXOne Networks and Garland Technology

Network defense for OT environments is essential for protecting critical assets from cyber attacks that could disrupt operations, damage equipment or cause safety hazards. TXOne's EdgeIPS helps to ensure the reliability, safety and availability of industrial processes and infrastructure by learning, monitoring, and protecting the trusted OT protocols that ensure the operations keep running with zero impact.

When paired with Garland Technology's purpose-built Network TAPs, Network Packet Brokers, and Inline Bypass solutions, EdgeIPS deployments have enhanced fail-safe measures across fiber infrastructure or critical availability areas, as well as guaranteed network access to 100% of the packet level data for inline or offline implementation.

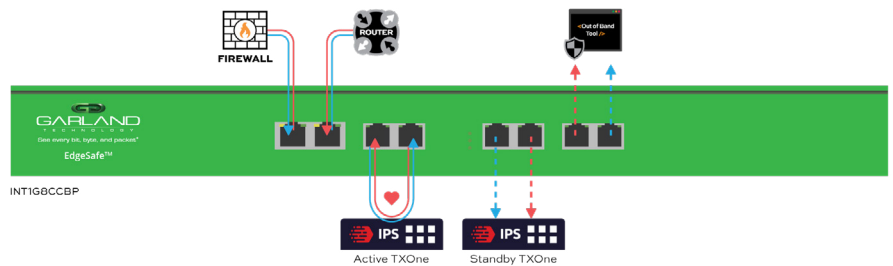# HOW IT WORKS | SCENARIO 1
Fiber Bypass

Intelligent network visibility starts with using Garland Technology Network TAPs to copy full duplex traffic from the IT and/or OT network. Garland's TAPs help overcome limitations that occur when SPAN/mirror ports are used, while providing data diode functionality to guarantee unidirectional traffic flow.

1. In customer environments with a fiber infrastructure, a Garland Technology EdgeSafe Bypass TAP is installed inline between the firewall and the router.
2. Utilizing its heartbeat packet technology, the Bypass TAP can check the status of EdgeIPS. As long as the heartbeat sent to EdgeIPS is received back to the TAP, traffic keeps flowing through EdgeIPS to filter the network traffic and ensure only trusted OT/ICS protocols pass through to the OT assets. This protects the operation from malicious threats or human error that can jeopardize production or safety. If the heartbeat packet is not received, the Bypass TAP will effectively 'bypass' EdgeIPS, keeping the customer's network link up and avoiding unplanned downtime.
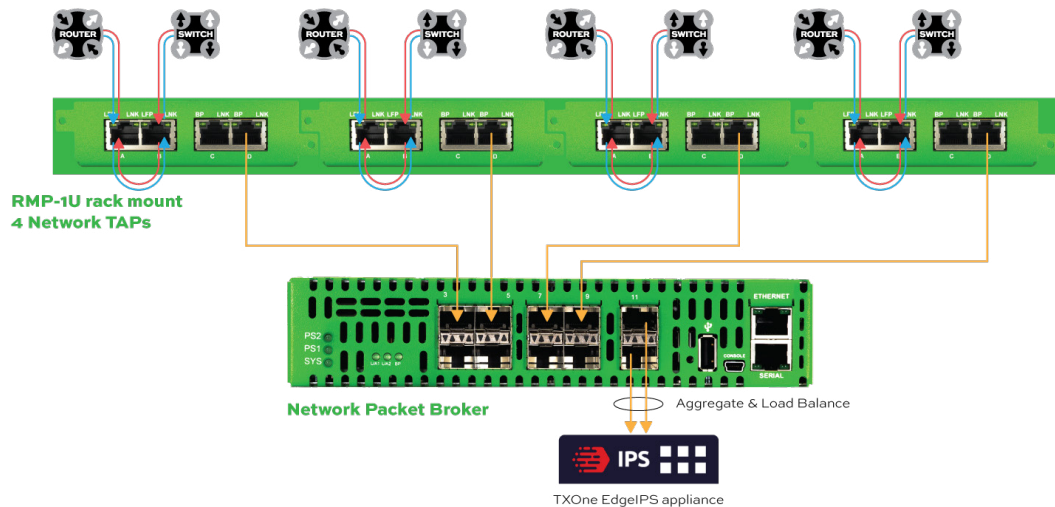

FIREWALL

ROUTER

P1GMCBP(E)

TXOne EdgeIPS appliance
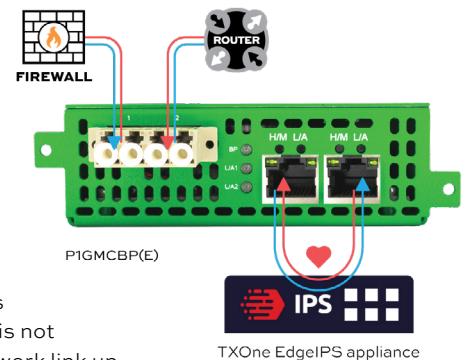
SCENARIO 2
High Availability

1. Customers looking for added resiliency and redundancy for critical links in their environment may look to deploy EdgeIPS in a High Availability (HA) deployment.
2. Utilizing Garland Technology's EdgeSafe Integrated Bypass TAP, deploying a HA scenario is simple to set up and configure, ensuring secure network continuity.
3. By tapping just one link, the primary and backup TXOne EdgeIPS appliances can be connected in an Active-Standby deployment. Should the Active EdgeIPS appliance need to go temporarily offline for any reason, including planned downtime for troubleshooting, maintenance windows, and firmware updates, the Integrated Bypass TAP will automatically failover to the Standby EdgeIPS appliance, keeping your critical links up while you resolve the issue.

FIREWALL

ROUTER

Out of Band Tool

GARLAND
TECHNOLOGY
See every bit, byte, and packet®
EdgeSafe™

INT1G8CCBP

Active TXOne EdgeIPS

Standby TXOne EdgeIPS

SCENARIO 3
TAP to Aggregation

RMP-1U rack mount
4 Network TAPs

Network Packet Broker

Aggregate & Load Balance

TXOne EdgeIPS appliance

1. Garland Technology also supports when the TXOne EdgeIPS needs to be deployed in a passive, out-of-band scenario. For customers looking to deploy EdgeIPS in this manner, utilizing a Garland TAP-Agg solution ensures 100% of the network traffic passes to the EdgeIPS for building out OT communication polices to enhance security and operational resilience in live deployments.
2. Garland Technology Network TAPs provide 100% packet data from any point in the network.
3. Multiple tapped links send the copied traffic to a Network Packet Broker where the data is groomed through aggregation and load balancing before being sent on to the TXOne EdgeIPS.
4. The TXOne EdgeIPS will retrieve the OT asset information and build out policies for the OT network traffic. The EdgeIPS can then be deployed inline with production environments to enforce trust lists and filter OT communications.

Joint Solution Benefits

- Purpose built, OT native technologies
- Support for over 6000 combinations of ICS protocols
- Comprehensive, scalable form factors, optimized for your network requirements
- Remove complexity, ensuring your program is as efficient and robust as your organization deserves
- Ensure availability with easy inline deployment options that require zero configuration changes to the existing infrastructure
- Eliminate single points of failure on the OT network

About TXOne

TXOne Networks offers cybersecurity solutions that ensure the reliability and safety of ICS and OT environments through the OT zero trust methodology. TXOne Networks aims to protect Cyber-Physical Systems by comprehending their operation and contextualizing them with security measures. We propose a framework to safeguard critical assets throughout their entire life cycle. To learn more, visit www.txone.com.

About Garland Technology

Garland Technology is an industry leader of IT and OT network solutions for enterprise, critical infrastructures, and government agencies worldwide. Since 2011, Garland Technology has been engineering and manufacturing simple, reliable, and affordable Network TAPs and Network Packet Brokers in Richardson, TX. For help identifying the right IT/OT network visibility solutions for projects large and small, or to learn more about the inventor of the first bypass technology, visit GarlandTechnology.com.

Have Questions?

sales@garlandtechnology.com | +1 716.242.8500

GarlandTechnology.com/txone

GARLAND
TECHNOLOGY

See every bit, byte, and packet®