



Datasheet

SenninRecon

Intent-Based Industrial Awareness Sensor

Enabling Real-Time OT Visibility and Awareness to Power Intelligent Security Analysis

As industries advance into the era of Industry 4.0, the convergence of Operational Technology (OT) and digital systems is transforming manufacturing and industrial operations. However, this evolution also introduces increasing cyber risks, including ransomware, supply chain attacks, and threats targeting critical infrastructure. To address these challenges, TXOne delivers a purpose-built approach focused on continuous visibility and situational awareness across OT environments.

TXOne's SenninRecon is designed to provide deep asset visibility and comprehensive situational awareness across OT environments. Through active scanning, SenninRecon enables organizations to accurately discover assets within defined network ranges and collect detailed asset intelligence, forming a solid foundation for effective risk assessment and security analysis.

SenninRecon continuously monitors OT environments to detect anomalies, identify suspicious behaviors, and alert operators to potential cyber risks without disrupting production. Designed for non-intrusive deployment, it operates in an out-of-band manner by receiving mirrored traffic through designated network ports, ensuring operational continuity while enhancing situational awareness.

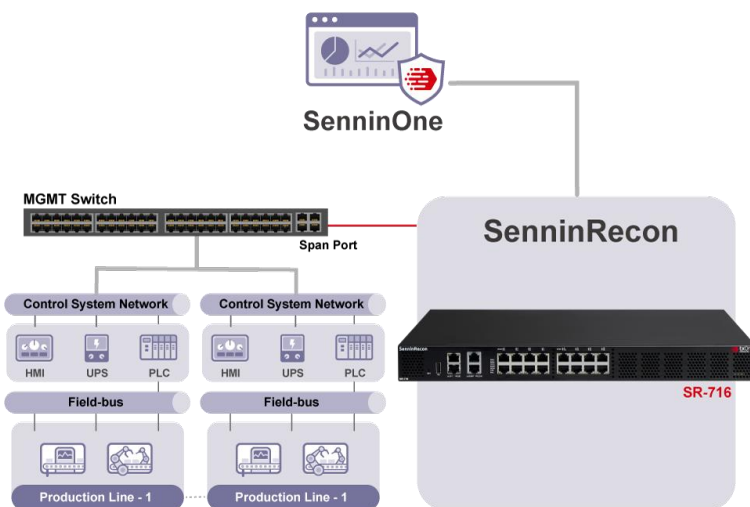
By integrating with SenninOne, TXOne's OT Cybersecurity Governance Platform, organizations can further correlate collected telemetry with advanced security intelligence. This enables comprehensive analysis, including traffic compliance validation, threat detection, and cross-domain visibility, empowering security teams to make informed decisions and respond proactively to potential risks.

Solution Overview

Operating out-of-band, SenninRecon collects mirrored traffic through designated network ports, ensuring zero interference with existing network architecture. This approach provides deep insight into network communications without introducing latency or requiring modifications to current network configurations.

For organizations requiring deeper visibility, SenninRecon combines active scanning with network-based monitoring to enhance OT visibility and insight. It enables organizations to systematically discover assets within defined network ranges while analyzing network activities to identify anomalies and suspicious behaviors.

Within the TXOne ecosystem, SenninRecon functions as a dedicated telemetry source. When integrated with SenninOne, TXOne's OT Cybersecurity Governance Platform, the collected data is correlated to deliver comprehensive visibility and insight across assets and risks, empowering security teams to make data-driven decisions.



Core Capabilities



Adoption

Fulfilling Technical and Operational Demands with a Swift Onboarding Flow

- ❖ Sensor-based licensing with flexible tiers to support different asset management needs.
- ❖ Monitors the entire shop floor with a single, high-port-density SenninRecon device.
- ❖ Easy on-site installation for rapid deployment.



Detection

Enabling Continuous Monitoring and Detection Without Operational Disruption

- ❖ Discovers assets within defined IP ranges to provide comprehensive asset visibility.
- ❖ Profiles asset details through protocol-based analysis, including software, patch status, interfaces, and device attributes.
- ❖ Enables deep network traffic analysis for compliance monitoring and security insights through SenninOne integration.



Awareness

Enhancing OT Awareness with Actionable Insights

- ❖ Monitors network communications and provides timely warnings on potential security risks.
- ❖ Integrates with SenninOne to enable centralized visibility, policy alignment, and risk correlation across environments.
- ❖ Supports advanced analytics, including vulnerability insights, threat prioritization, and cross-domain visibility.

Key Features



Pioneering AI-Powered Asset Discovery Technology

SenninRecon introduces a pioneering AI-powered asset discovery technology tailored for ICS environments. By combining network traffic analysis with active scanning capabilities, it accurately identifies assets across the network, delivers rich asset intelligence, and streamlines administrative workflows and deployment planning to improve asset management efficiency.



Cyber-Physical System Detection and Response

SenninRecon is built on TXOne's pioneering CPSDR (Cyber-Physical System Detection and Response) technology, designed to identify anomalous network behaviors at an early stage. By integrating seamlessly with TXOne protection solutions, CPSDR enables coordinated detection and response while reducing unnecessary integration efforts. This unified approach helps OT networks stay ahead of potential cyber risks.



Mastering Industrial Protocols

SenninRecon supports a variety of OT protocols, including Modbus, SECS/GEMS, CIP, and more, to allow OT and IT security administrators to collaborate for seamless operation within the existing network architecture.



OT-Aware Operational Intelligence

Our core technology for SenninRecon, TXOne One-Pass DPI for Industry (TXODI), gives you the ability to detect and identify asset's behavior, enabling non-intrusive asset information gathering between key nodes and deep analysis of L2-L7 network traffic.



Malware and Malicious File Transfer Detection

SenninRecon detects malware and malicious file transfers within OT network traffic across protocols such as HTTP, FTP, and SMB. Configurable scanning controls, including file size limits and compressed file inspection, ensure efficient and non-disruptive monitoring of potential threats.



Unrivaled Threat Intelligence

Leveraging the Zero Day Initiative (ZDI) vulnerability rewards program, SenninRecon enhances detection of undisclosed and zero-day threats with continuously updated threat intelligence.



Zero Impact on Existing Network Architecture

SenninRecon operates out-of-band to non-intrusively capture mirrored traffic through designated network ports, ensuring no changes to the existing OT network architecture while delivering valuable network insights.



High Port Density for Enhanced Asset Discovery Efficiency

SenninRecon flexibly switches between MGMT and SCAN ports during active scan tasks and supports 16 data ports for receiving mirrored traffic to maximize the efficiency for asset discovery.



Expanding Visibility Across OT Environment

SenninRecon is designed to seamlessly integrate and coordinate your IT and OT networks, while also providing visibility into your shadow OT environment.



Holistic CPS Governance Platform Integration

By integrating SenninRecon with TXOne SenninOne, organizations gain centralized visibility, asset correlation, and cross-domain analysis across OT environments. This integration extends beyond visibility, delivering comprehensive insights into assets, network activities, and potential risks. It also provides actionable insights and recommendations to support security operations and deployment planning.



Centralized Management with Convenient, Consolidated Overview

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

SenninRecon Hardware

SenninRecon



438 mm x 410 mm X 44 mm (17.24 in X 16.14 in X 1.73 in)

Front Panel



Rear Panel



SenninRecon Specifications

Feature	SenninRecon SR716
Threat Inspection Throughput*	7.2Gbps at least (IMIX) / 12Gbps (UDP 1518 bytes)
Concurrent Connection (TCP)	2 million
Security Monitoring	Intrusion detection / Malware detection / CPSDR-Networking
Supported ICS Protocol detection	Modbus / EtherNet IP/ CIP / FINS / S7Comm / S7Comm+ / SECS / GEM / IEC61850-MMS / IEC-104, with more being added regularly
Form Factor	1U rack mount
Weight (Standalone Device)	7.69 kg (16.953 lb)
Dimensions (W x D x H)	438 mm x 410 mm X 44 mm (17.24 in X 16.14 in X 1.73 in)
Network Interface Type	10Mbps/100Mbps/1Gbps BASE-TX (RJ-45) x 16 ports
USB Interface / Serial Console	1x USB interface (Type-A) / 1x RJ-45 interface for serial console
MGMT Interface / Mirror Interface	1 x 100Mbps/1Gbps/10Gbps RJ-45 for OOB MGMT port / 1 x 100Mbps/1Gbps/10Gbps RJ-45 for Scan port
Input Voltage	90-264 VAC FULL RANGE
Power Supplies	Redundant 800W power supply (1+1 AC, active-active) (hot swappable)
Operating Temperature	0 - 40°C (32 - 104°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
Storage Temperature	-40 - 85°C (-40 - 185°F)
Vibration	2 Gems @ UEC 60068-2-64, random wave, 5-500HZ, 1hr per axis (without any USB devices attached)
Mean Time Between Failure (MTBF)	65,000 hours (under 25°C)
Safety Certification	CE, UL, EN60950-1, IEC60950-1, UL60950-1
Electromagnetic Compatibility	VCCI, FCC
Rack Rail Support	Rack mounting ears, sliding rails
Green Product	RoHS, CRoHS, WEEE
Central Management System	Support SenninOne

* Note: Performance and latency are measured in a laboratory; these values may vary according to test conditions and system configuration.

* Each SenninRecon is entitled to 1 year of hardware warranty. Upon renewal of the software license and hardware warranty extension, the hardware warranty will be able to be extended for the same renewal period, subject to a maximum warranty period of 7 years.