BELDEN
SENDING ALL THE RIGHT SIGNALS

Industrial Cyber Security Solutions

HIRSCHMANN
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GarrettCom®
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TOFINO SECURITY
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tripwire®

Broad portfolio of industrial hardware and software solutions designed to maximize productivity, safety and quality for mission-critical applications
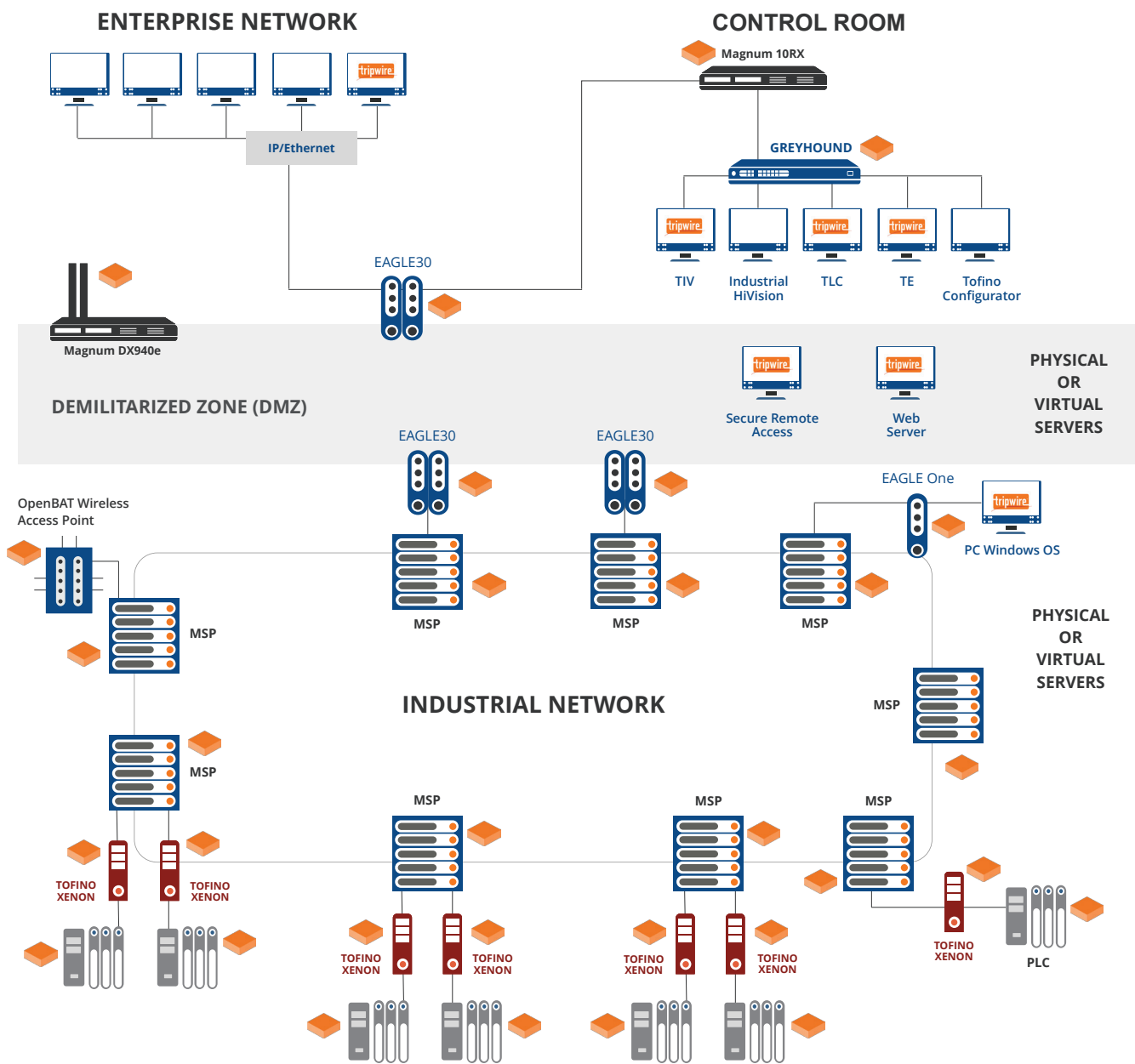
Be certain.
Belden.

Industrial Cyber Security

Secure. Reliable. Resilient.

Your industrial infrastructure faces new threats every day. Whether intentional and malicious or unintentional and accidental, the impact of these threats can be tremendous, leading to costly downtime or lapses in control that could jeopardize the operational safety of your systems.

Protect your infrastructure. Belden's broad portfolio of industrial cyber security products enables coverage for all types of threats – deliberate or involuntary. From hardware devices with embedded security features to cyber resilient software, you'll find your end-to-end security solution with Belden.

ENTERPRISE NETWORK

IP/Ethernet

EAGLE30

Magnum DX940e

DEMILITARIZED ZONE (DMZ)

OpenBAT Wireless Access Point

EAGLE30

EAGLE30

MSP

MSP

MSP

MSP

MSP

INDUSTRIAL NETWORK

MSP

MSP

MSP

MSP

MSP

TOFINO XENON

TOFINO XENON

TOFINO XENON

TOFINO XENON

TOFINO XENON

TOFINO XENON

TOFINO XENON

PLC

CONTROL ROOM

Magnum 10RX

GREYHOUND

TIV | Industrial HiVision | TLC | TE | Tofino Configurator

PHYSICAL OR VIRTUAL SERVERS

Secure Remote Access

Web Server

EAGLE One

PC Windows OS

PHYSICAL OR VIRTUAL SERVERS

TLC = Tripwire Log Center | TE = Tripwire Enterprise | TIV = Tripwire Industrial Visibility
Industrial visibility, protective controls and monitoring enabled through active and passive solutions:
Tripwire Enterprise, Tripwire Log Center and Tripwire Industrial Visibility

Integrate cyber security with your existing infrastructure. The reference architecture above shows a typical model for coverage of a plant operation. The ring topology is just one of many configurations our solutions support. For information regarding our full portfolio of products, please visit Belden.com and Tripwire.com.

Tripwire US 1-503-276-7500   ▪   belden.com   ▪   Belden US 1-855-400-9071

Core-to-Edge Firewall Solutions for OT Environments

EAGLE One
Security Bridge and Router

- Combine Stateful Packet Inspection (SPI) for bridged or routed communications with unique Firewall Learning Mode

- Add safe, cost-effective protection to your industrial automation network

- Build redundant backbone network connections for production cells combined with comprehensive Network Address Translation (NAT) techniques

EAGLE20/EAGLE30
Industrial Firewalls with HiSecOS Software

- Use Stateful Packet Inspection (SPI) firewalling and optional Deep Packet Inspection (DPI) for routed communication to secure industrial networks

- Build connections with 2 optional SHDSL ports and up to 6 LAN ports – 2 of which are Gigabit

- Deploy easily with one-click rule setup with unique Firewall Learning Mode

- Reduce downtime with redundancy protocols, including Virtual Router Redundancy Protocol (VRRP)

Tofino Xenon
Security Appliance with DPI

- Protect PLCs, RTUs and other control devices with this stealth industrial firewall that provides stateful and industrial protocol deep packet inspection at Layer 2 (data link).

- Simplify installation: Zero-impact Plug-n-Protect technology requires no pre-configuration, no network changes, and no disruption to the control system

- Configure-Test-Deploy: Zero-day vulnerability protection with deep protocol awareness that is not dependent upon vulnerability updates

Industrial Routers with Built-in Security

Magnum 10RX
Router and Security Appliance

- Built-in firewall protection and virtual private network (VPN) security with Layer 3 advanced routing

- Be compliant with IEC 61850 for substations

- Reduce downtime via a dual, hot-swappable feature for field replacements on live networks

- Follow a natural migration path to high performance Gigabit Ethernet and TCP/IP

Magnum DX940e
Industrial Cellular Router

- Configure with flexibility: 6 Gigabit ports, optional WAN (T1/E1) port, serial ports and 4G/LTE cellular

- Connect easily through this 4G/LTE cellular gateway with advanced firewall, VPN, routing and crypto capabilities

- Provide secure, reliable connectivity over a cellular network

Remote Access

Secure Remote Access Solution

- Provide remote network access and diagnostics through a simple three-component system:
  - **GateManager** operates as a cloud service; hosted by Hirschmann or hosted by your company
  - **SiteManager** makes it possible to connect remote devices to the GateManager cloud; runs on a Windows PC or selected Hirschmann devices
  - **LinkManager** provides secure, on-demand access to remote devices via the cloud

Cyber Resiliency Software and Support

Tripwire Industrial Visibility (TIV)

- Completely passive solution that dissects industrial network traffic to perform industrial asset discovery, profile all industrial protocol communication, and provide threat detection from the DMZ down to the field I/O devices

- Understands over 40+ industrial protocols including EtherNet/IP, ModBus, DNP3, S7, PROFINET, IEC 101/104, GOOSE, and Bacnet

- Provides visibility into controller mode changes, configuration changes, and firmware uploads

- Diagrams network communication traffic patterns via Purdue model

Tripwire Enterprise (TE) Security
Configuration Management Suite

- Featuring the Tripwire Data Collector, think of it like a "Security SCADA" that provides full network visibility and understands common Industrial protocols such as Modbus TCP and Ethernet/IP

- Manage easily: agentless monitoring requires no software installation or changes

- Industrial Integrations: Rockwell AssetCentre, MDT AutoSave and Kepware KEPServerEX

- Maximize uptime with real-time detection of threat detection

- Gain deep visibility into your cyber security hygiene and monitor PCs, PLCs, and other network hardware for changes

- Instantly gain broad cyber security coverage in order to comply with an increasing number of industry standards, such as NERC CIP, IEC 62443, and NIST

Tripwire Log Center (TLC)

- Think "Security Historian" with the ability to turn out robust reporting on all log data

- Featuring an included, purpose-built dashboard for out of the box functionality with the Tofino Xenon

- Log collection from a variety of sources to easily interpret and parse data for analysis and reporting

- Create custom dashboards to gain real-time visibility to critical events

- Create your own correlation rules with simple, Visio-like interface

Take Your First Steps to Real Network Security

Network Security	Log Management	Vulnerability Assessment	Change Detection	Integrity Monitoring
Integrated	**Passive**	**Periodic**	**Continuous**	
• Network discovery	• Syslog data collection	• Security vulnerability & configuration assessment	• Real-time change detection	
• Network access control	• Log filtering & management	• Best practice & policy tests	• Best practice assessment & remediation	
• Denial of Service (DoS) protection	• Investigation analytics & reporting		• Compliance analytics & reporting	
• Zones (network segmentation) & conduits (traffic filtering)				
• Bandwidth limitation				
• Deep Packet Inspection for Industrial Protocols				

A true security solution expands and changes over time. Follow a continuum like this one –
from network infrastructure to passive logging to more advanced solutions, such as continuous real-time change detection.

Optimize your plant operations for complete safety and security.

Call your Belden or Tripwire sales representative to schedule a demonstration.
Or visit our websites at www.Belden.com and www.Tripwire.com.

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Belden Competence Center

As the complexity of communication and connectivity solutions has increased, so have the requirements for design, implementation and maintenance of these solutions. For users, acquiring and verifying the latest expert knowledge plays a decisive role in this. As a reliable partner for end-to-end solutions, Belden offers expert consulting, design, technical support, as well as technology and product training courses, from a single source: Belden Competence Center. In addition, we offer you the right qualification for every area of expertise through the world's first certification program for industrial networks. Up-to-date manufacturer's expertise, an international service network and access to external specialists guarantee you the best possible support for products. Irrespective of the technology you use, you can rely on our full support – from implementation to optimization of every aspect of daily operations.