



Protecting Critical Infrastructure and Operational Efficiency

Manufacturing companies are increasingly integrating production and industrial control systems (ICS) with the corporate network. This integration helps streamline processes and decision-making, but because industrial networks are no longer isolated, it exposes manufacturing computing and controller assets to outside attacks from hackers and malware. Securing this infrastructure is essential to protecting manufacturers from the costly consequences of cyber attacks. At the same time, operations teams need to be able to maintain operational control and efficiency without IT interference.

Tempered Networks provides a best-practice security solution that helps manufacturing companies' IT departments protect SCADA and ICS networks with military-grade security while allowing operations teams to retain the local control of the network environment they need to meet operational goals.

Segment and cloak production and SCADA networks

With the Tempered Networks solution, manufacturers can segment and isolate connectivity to and between production and control systems. The solution provides a private overlay network and cloaks all devices within it, leaving no external configuration footprint. Manufacturers can leverage existing infrastructure to enable connectivity with remote sites and legacy devices over untrusted networks, without exposing device communications or requiring complex configurations.

Securely connect and monitor remote devices across locations

By introducing an independent layer of connectivity, security, and trust management, the Tempered Networks solution enables easy and effective connectivity in the machine-to-machine environment, where physical equipment and legacy systems must be linked to an IP network via an Ethernet or a digital, analog or serial network. The solution provides the secure management of all devices on an ICS—even across a third party's network infrastructure or in remote manufacturing locations. The solution is transport- and topology-agnostic, supporting any mix of cellular, WiFi, wired Ethernet, satellite communications, and public cloud networks.

Benefits

- Extends the network: IT or operations teams can easily and securely extend networks to remote locations using wired, WiFi, cellular, SatCom, and public cloud networks
- Centralizes governance: Facilitates administration and departmental provisioning of private overlay networks
- Integrates with legacy and modern infrastructure: Private overlay networks can be easily integrated with any existing IT security and network infrastructure
- Cloaks critical assets: Isolates and encrypts communications to cloak ICS and SCADA devices
- Increases operational integrity and availability: Facilitates monitoring and predictive maintenance to maximize uptime
- Enables secure remote access:
 Highly constrained remote access
 can be easily granted and revoked
 without impacting the underlying
 network
- Easy to deploy and maintain: Intuitive management user interface does not require advanced IT security expertise

Easily manage third-party access

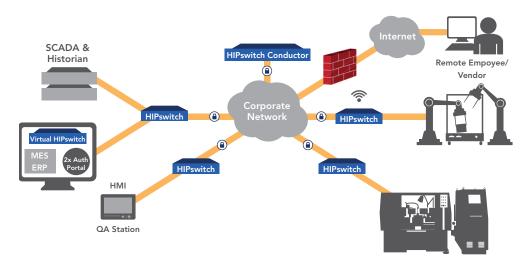
Providing network access to vendors and contractors can introduce an additional security vulnerability. With the Tempered Networks solution, third-party access can be granted and revoked in just minutes, without modifying the shared network. Access can be constrained to a single, isolated device or a group of devices and for a specific period of time. The solution can also be configured to require user authentication.



Military-Grade Security

- Secure channels bound to unique RSA 2048-bit cryptographic identities
- Per-peer explicit trust relationships validated up the certificate chain with SHA-256 signatures
- Secure channels protected with Diffie-Hellman exchange, AES-256 encryption, SHA-1 message authentication
- Stateful packet inspection (SPI)
- Denial of service (DoS) mitigation
- Full lifecycle identity management, including instant blacklisting and revocation
- Microsegmentation based on device whitelisting

The Tempered Networks Solution for Manufacturing Companies



The solution provides a secure overlay network among HIPswitch™ appliances that secures connections for ICS systems and remote devices. The HIPswitch Conductor™ orchestration engine coordinates configuration, security policies, trust relationships, monitoring and

Take control of your critical infrastructure with Tempered Networks' proven solution for keeping industrial, commercial, and public sector systems and assets secure and resilient.

To learn more, email sales@temperednetworks.com, call 206.452.5500, or visit temperednetworks.

