Introducing the 9202-ETS MTL Tofino™ industrial Ethernet security appliance

HAKIM-Product Sales Engineer
**Cybersecurity of valuable assets and processes in a wide range of industry verticals, such as:**

- Oil & Gas
- Process
- Power
- Chemical
- Utilities
- Pipeline
- Marine
- Pharmaceutical
General Market Drivers

- Major cyber attacks on DCS networks over the last decade
- Requirement for minimum or zero interruption in manufacturing processes
- Growing use of ethernet in the plant floor with increasing points of vulnerability
- Plug & play solutions requiring minimum IT skill for configuration/maintenance

Cybersecurity is now in the top 10 key concerns of decision making boards
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- Viruses, Worms, Malware
- Application of security patches
- Unauthorized actions by vendors
- Unintended employee actions
- Sabotage
- Denial of service
- Unauthorized access
- Unauthorized actions by employees
- Natural or manmade disaster
- Theft
Cyber security incident types

<table>
<thead>
<tr>
<th>Incident Type</th>
<th>Insider</th>
<th>Outsider</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human error</td>
<td>14%</td>
<td>0%</td>
<td>48%</td>
</tr>
<tr>
<td>Software or device flaw</td>
<td>14%</td>
<td>0%</td>
<td>48%</td>
</tr>
<tr>
<td>Malware infection</td>
<td>47%</td>
<td>53%</td>
<td>0%</td>
</tr>
<tr>
<td>External Hacker</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Disgruntled Employee</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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</tbody>
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Networks are vulnerable to both malicious AND accidental threats.

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Why Tofino? Traditional Firewall vs Tofino

**Traditional Firewall**

- Too complex for many expertise to configure correctly.
- Even harder to set up properly to the plant floor.
- Once break by virus or hacker, PLC or DCS is an easy target.

**Tofino**

- Design for industrial needs with defence—in depth solution.
- Suitable for new and legacy control system.
- Simple enough to install.
- No need IT expertise.
- Technician and electrician can do the installation.
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Enhancing our already proven network security solution with new features
Bundled solution to meet your cybersecurity needs

1. MTL Tofino™ appliance (9202-ETS)
2. MTL Tofino™ configurator (9511-TC)
3. MTL Tofino™ loadable security modules (9522-xxx)

Three simple steps to a complete network security solution
What’s new with our next generation solution?

- More ruggedised hardware
- All front accessible interfaces
- Built in Firewall and Event Logger LSMs with each 9202-ETS
- Free configuration software (TC)
- NetConnect LSM required for 9202-ETS for network configuration
- Built in firewall templates on Tofino Configurator
- New Ethernet/IP enforcer
- Increased warranty: now up to 5 years
• We can’t just install a firewall at the edge of the network and forget about security.
  - The bad guys will eventually get in
  - Many problems originate inside the plant network
• We must harden the plant floor.
• We need Defense in Depth.
  - Identify the IEC 62443 (ISA99) ‘Zones’ and ‘Conduits’ in the network
  - Allow only minimum required network traffic to pass between zones
  - Generate alarms when traffic blocked

How Much Security Do I Need? Where Do I Put It?

Perimeter defence is NOT enough

Crouse-Hinds by Eaton
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Typical control network
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Recommended Tofino Deployment Cycle

**Design**
- Define Zones and Conduits
- Select Appliance Hardware and Software Options

**Install**
- Install Appliances
- Install Software

**Config**
- Basic Appliance Configuration
- Initial Firewall and Content Inspection Rules

**Test**
- Test and Edit Firewall and Content Inspection Rules
- No Alarms Generated during Normal Plant Operation

**Deploy**
- Configure and Test Event Logging and Alerting
- Set Appliances to Operational Mode
Our solutions help you to...

1. Minimise installation costs
2. Competitive total equipment cost
3. Maximise availability & reliability
4. Meet or exceed performance requirements
### 9202-ETS MTL Tofino™ industrial ethernet security solution

**Products built to meet and exceed certifications around the world to ensure safety of employees and equipment.**

- ATEX Zone 2
- UL508, cUL508, ISA12.12  
  (Class I Division 2 Hazardous Locations)
- CE, FCC, EN61131, EN60950

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**Designed for global specifications**

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