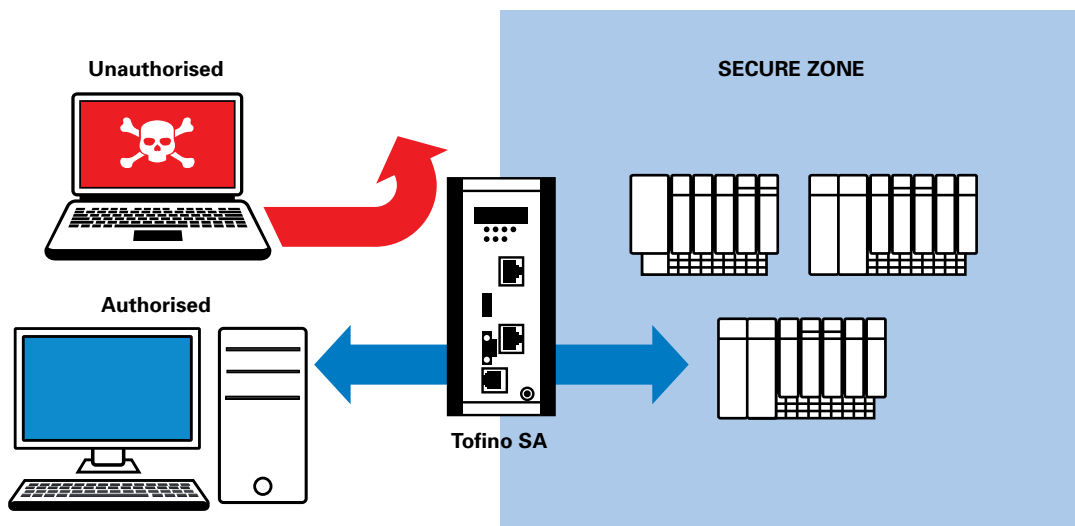


Tofino™ 9202-ETS range

Key Features:

- Improved system reliability and stability
- Reduced down time and production losses
- Lower maintenance costs
- Simplified regulatory and security standard compliance
- Plug-n-Protect installation requires no preconfiguration, no network changes, and no disruption to the control system
- Simple configuration over the network using the free Tofino Configurator software
- Unique 'Test' mode allows firewall testing with no risk to your operation
- Pre-installed Firewall, Event Logger and NetConnect Loadable Security Modules (LSM)
- Compatible with all DCS, PLC, SCADA, networking, and software products
- Both Multimode and Singlemode fibre optic hardware versions for long distance applications
- Rugged hardware design for years of reliable service
- Secure networks with security zones as per NERC, ANSI/ISA, and IEC standards
- Protect connections to partners networks and wireless networks
- Improve SCADA and process control network reliability and performance



SPECIFICATIONS

Ethernet Interfaces

Part number	Media	Net 1	Net 2
9202-ETS	Copper/Copper	100BASE-TX	100BASE-TX
9202-ETS-MC-SC	Multi-mode/ Copper	100BASE-FX	100BASE-TX
9202-ETS-MM-SC	Multi-mode/ Multi-mode	100BASE-FX	100BASE-FX
9202-ETS-SC-SC	Single-mode/ Copper	100BASE-FX	100BASE-TX

(dependent on device variant)

Additional Interfaces

USB Interface

1 x USB socket to connect load/verify configuration

Digital Input

1 x plug-in terminal block, 2-pin

Signalling Contact

1 x max. 60 V DC or max. 30 V AC, SELV, max. 1A

Network Size

Twisted Pair (TP)

0 to 100 m

Multimode Fibre (MM) 50/125 µm

0 to 5000 m, 8 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB Reserve, B = 800 MHz x km

Multimode Fibre (MM) 62,5/125 µm

0 to 4000 m, 11 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB Reserve, B = 500 MHz x km

Singlemode Fibre (SM) 9/125 µm

0 to 30 km, 16 dB Link Budget at 1300 nm, A = 0.4 dB/km, 3 dB Reserve, D = 3.5 ps/(nm x km)

Power Requirements

Operating Voltage

12 to 48 V DC, 24 V AC redundant power supply

Power Consumption

5 Watts

Power Supply/Signaling Contact

1 x plug-in terminal block, 6-pin

Software

Management

MTL Tofino Configurator (TC) software

Loadable Security Modules (LSMs)

Basic LSMs (pre-installed): Firewall, Event Logger & NetConnect Enforcer LSMs (to be ordered separately): Modbus TCP Enforcer (9522-MBT), OPC Enforcer (9522-OPC), EtherNet/IP Enforcer (9522-EIP), DNP3 Enforcer (9522-DNP3), IEC104 Enforcer (9522-IEC104) & GOOSE Enforcer (9522-GOOSE)

Diagnostics

LEDs (power, mode, fault, save/load, reset, link status), signal contact, syslog, configuration verify

Firewall

Stateful layer 2, 3 and 4 filtering with optional deep packet inspection for SCADA protocols (depending on purchased LSMs)

System Requirements

Windows XP, Windows 7 (32- and 64-bit), or Windows Server 2003, 2008, or 2008 SR2

Configuration method

Network

Tofino Configurator uses secure communications to configure the Tofino security appliance

Manual

Encrypted configuration files may be saved on a USB storage device and loaded into the Tofino security appliance via a secure USB port

Operating modes

Test

All traffic allowed; alerts generated as per user rules

Operational

Traffic filtered and alerts generated as per user rules

Mode changes

Operating mode is controlled remotely from the free Tofino Configurator software

Audit log

Audit capabilities for tracking configuration changes

Security alerts

Simultaneous event logging to a remote syslog server and local nonvolatile memory for later download via network or USB storage device

Ambient Conditions

Operating Temperature

-40°C to +70°C
(IEC 60068-2-2 Dry Heat Test +85°C 16 hours)

Storage/Transport Temperature

-40°C to +85°C

Relative Humidity (non-condensing)

10% to 95%

Conformal Coating

Option available (please see ordering information)

Mechanical Construction

Dimensions (WxHxD)

60 x 145 x 125 mm

Weight

660 g

Protection Class

IP20

Mounting

DIN Rail 35 mm

Approvals

Declaration of Conformity

CE, FCC, EN 61131, C-TICK, EN 60950

Safety of Industrial Control Equipment

cUL508

Hazardous Locations

ISA-12.12.-01 Class 1 Div. 2 – Haz. Loc, ATEX-95 Category 3G (Zone 2)

Reliability

MTBF

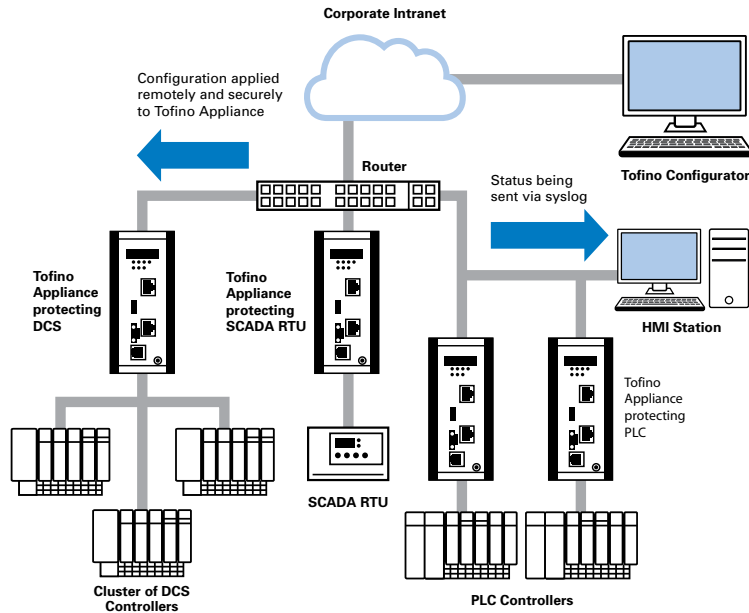
74.5 years

Warranty

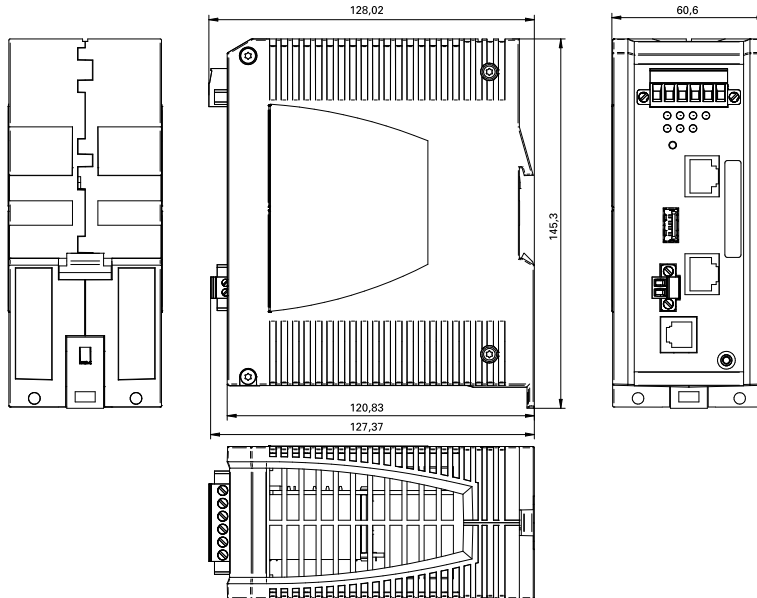
5 years (standard)

MTL 9202-ETS

March 2018



DIMENSIONS



ORDERING INFORMATION

Tofino Hardware

PART NUMBER	DESCRIPTION
9202-ETS	MTL Tofino SA Copper only
9202-ETS-MC-SC	MTL Tofino SA Multi-mode Fibre & Copper
9202-ETS-MM-SC	MTL Tofino SA Multi-mode Fibre only
9202-ETS-SC-SC	MTL Tofino SA Single-mode Fibre & Copper

Add - CC to above part numbers for Conformally Coated version for installations in corrosive environments

Tofino LSM

PART NUMBER	DESCRIPTION
9522-MBT	MTL Tofino Modbus TCP Enforcer LSM
9522-OPC	MTL Tofino OPC Enforcer LSM
9522-EIP	MTL Tofino Ethernet IP Enforcer LSM
9522-DNP3	MTL Tofino DNP3 Enforcer LSM
9522-IEC104	MTL Tofino IEC 104 Enforcer LSM
9522-GOOSE	MTL Tofino IEC 61850 GOOSE Enforcer LSM



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The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.