Technical data
MTL industrial security

March 2018
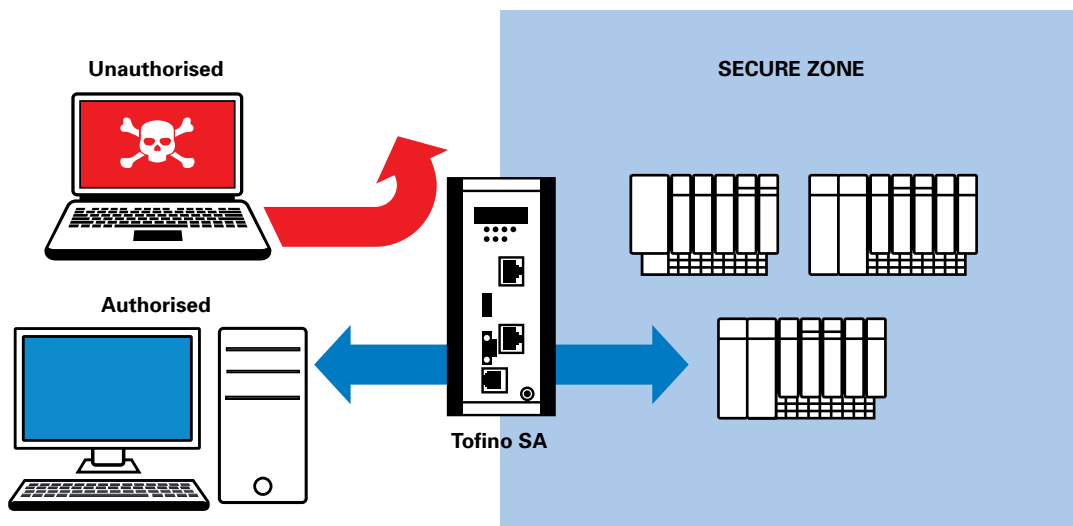EPS MTL 9202-ETS Rev4

CROUSE-HINDS
SERIES

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

Unauthorised

SECURE ZONE

Authorised

Tofino SA

EAT•N
Powering Business Worldwide

MTL 9202-ETS
March 2018

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,
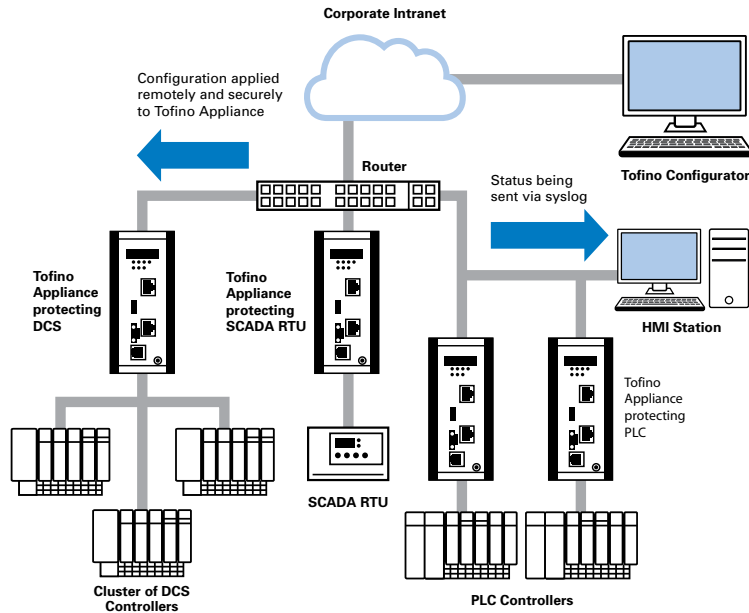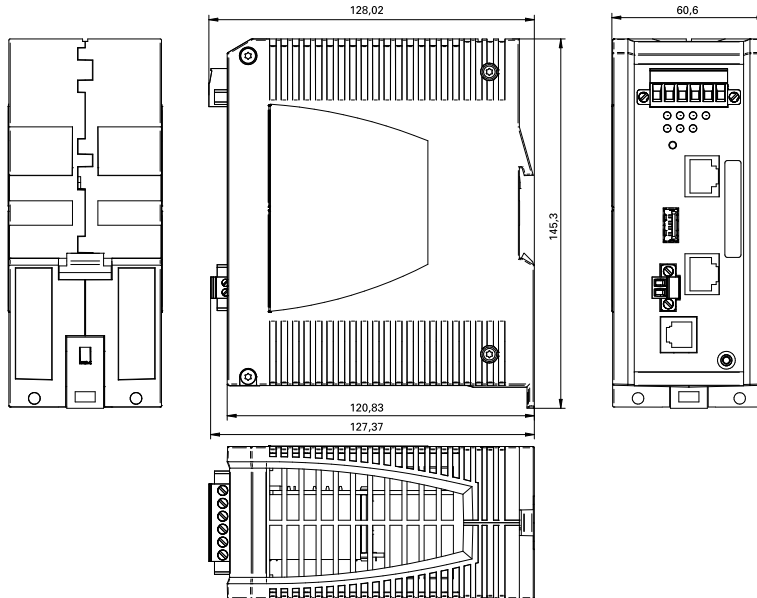ATEX-95 Category 3G (Zone 2)

Reliability

MTBF
74.5 years

Warranty
5 years (standard)

DIMENSIONS

128,02

60,6

145,3

120,83

127,37

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

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.

F·A·T·O·N
Powering Business Worldwide