TFG : MBsecure+ DATA SHEET

Technology Overview

Terafence is proud to present a unique and secure solution for distributing SCADA information between networks of different security classifications.

Supervisory Controls and Data Acquisition (SCADA) protocols are communication protocols designed for the exchange of control messages on industrial networks. Over the past three decades, several hundreds of these protocols have been developed for serial, LAN, and WAN-based communications in a wide variety of industries including petrochemical, automotive, transportation, and electrical generation/distribution.

SCADA Protocols (i.e. Modbus, Syslog, OPC etc) are the most widely used SCADA Protocol. **Terafence MBsecure+** allows network architects to interconnect network segments of unequal security classification without exposing the secure network to hacking attacks. The secure network (or segment) is physically ISOLATED (at OSI Layer 1/2) from the lesser secure segment. Data is transmitted downstream untouched.

Terafence MBsecure+ gateway acquires The required protocols data from sensors and PLCs over TCP/IP and responds to the HMI with the acquired data. At no time network access is available to the PLC from any device on the HMI network side.

The ISOLATION of the PLC / Sensor is done at OSI layers 1/2, the physical layer by a physical device.

ISOLATION is hardware based and has no CPU, no software, no IP address or MAC address.

Why choose MBsecure+ ?

Key Features:

- Up to 247 Modbus devices supported per unit
- Full Modbus RTU support
- Syslog Support
- MQTT Support
- SMTP Support
- OPC DA/UA Support*
- DNP3 Support*
- BACnet Support*
- Multiple HMI units support
- Hardware Reset to factory defaults
- High Availability (unit redundancy)

* Future release

Security Features:

- Physical ISOLATION at OSI Layer-1/2
- Secure unit access (HTTPS) with encryption keys
- Configurable HMI list to provide access restriction

Technical Specifications:

- **Data bandwidth =** 1 Gbps
- **Power –** 1x5VDC / 8AMP
- **No FANs, no disk drives**
- **2 x RJ-45 CAT6 connectors STP/UTP**
- **Physical ports –** 2 x 1 Gbps LAN ports
- **Measurements:** W x 290 , H x 50 , D x 230 (mm)
- **Power consumption:** max-40W
- **Mounting options:** Desktop | 19" Rack Shelf
- **35mm DIN Rail**

Managment:

- Unit configuration via Web based GUI

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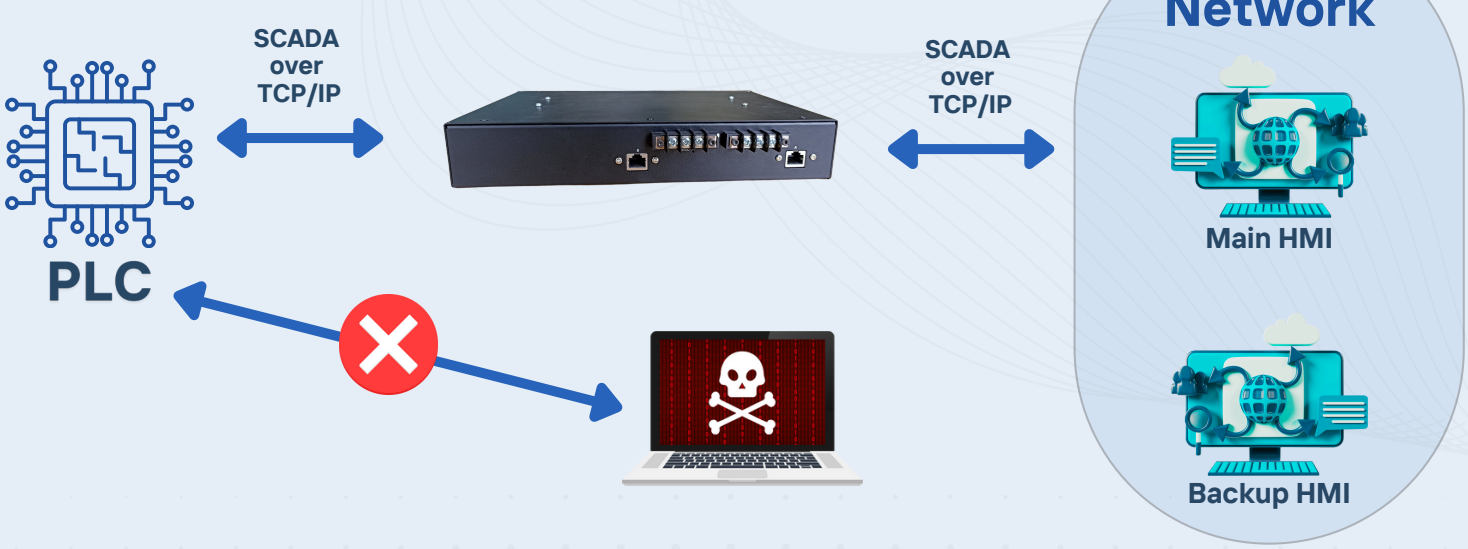
Solution Highlights :

- PLC is secure from attacks at OSI Layer-1, physical link.
- SCADA data is collected from PLC and is made available to the HMI for collecting.
- PLC read/poll command interval is configurable for maximum accuracy.
- Near Zero (30µs on average) latency through the unit.
- HMI restriction, only configured HMI units may request data.
- Unit is a network device / bridge, not a service or an application server.
- Unit configuration is available only via the PLC side (WEB GUI).
- No access to the unit from the HMI SIDE due to security hazards.



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