WATERFALL FOR IEC 60870-5-104

SECURE ENTERPRISE MONITORING OF IEC 60870-5-104 DEVICES

Industrial enterprises frequently need enterprise-wide access to data from devices supporting the IEC 60870-5-104 industrial communications protocol. Connecting enterprise networks to IEC 5-104 devices through firewalls is high risk. All software can be hacked, and all firewalls and IEC 5-104 implementations are software.

The Waterfall for IEC 60870-5-104 connector software is part of the Waterfall Unidirectional Security Gateway family of technologies. The connector gathers snapshots of state information IEC 5-104 devices on industrial networks in real time, sends those snapshots through the Waterfall unidirectional hardware and emulates IEC 5-104 devices on the enterprise or SCADA network. Enterprise & SCADA users and applications access the emulated devices bi-directionally, as if they were still communicating with the original devices. The Waterfall unidirectional hardware physically prevents any attack or malicious command from reaching the protected devices.

BENEFITS OF USING WATERFALL FOR IEC 60870-5-104

Secure, real-time unidirectional emulation of IEC 60870-5-104 devices to external SCADA and enterprise networks

External users and applications interact normally with accurate, timely replicas of IEC 60870-5-104 devices

Eliminates all remote attacks and malware propagation from external networks

Facilitates and simplifies compliance with NERC CIP, NIST, CFATS, ANSSI, UK DfT and more

Simple deployment, off-the-shelf solution

Rails   Oil & Gas   Manufacturing   Water   Power   Pharma

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The Waterfall for IEC 5-104 TX connector is an IEC 5-104 master and uses IEC 5-104 polls and report-by-exception events to gather a snapshot of the state of IEC 5-104-enabled devices. The TX module sends this snapshot to the RX module through the unidirectional hardware modules. The RX module is a IEC 5-104 slave, which waits for polls from the IEC 5-104 master, or reports by exception to that master station. The RX software serves as a faithful emulation of the enabled devices in the protected network, responding to interactions with the master in the same way as the emulated device would have responded, without permitting any messages back into the protected network. Enterprises deploying the Waterfall for IEC 5-104 connector benefit from increased visibility of industrial data, reduced compliance costs and dramatically reduced cyber risk and incident costs.

The Waterfall Unidirectional Gateway hardware deployed between both networks includes a TX Module containing a fiber-optic transmitter/laser, and an RX Module containing an optical receiver. The gateway hardware makes it physically impossible for attacks to flow from the external network towards the protected network, eliminating any threats of online attacks, malware or human errors.

| IEC 60870-5-104 RTUs | Unidirectional Gateway | Emulated 5-104 RTUs | Enterprise/SCADA users & applications |
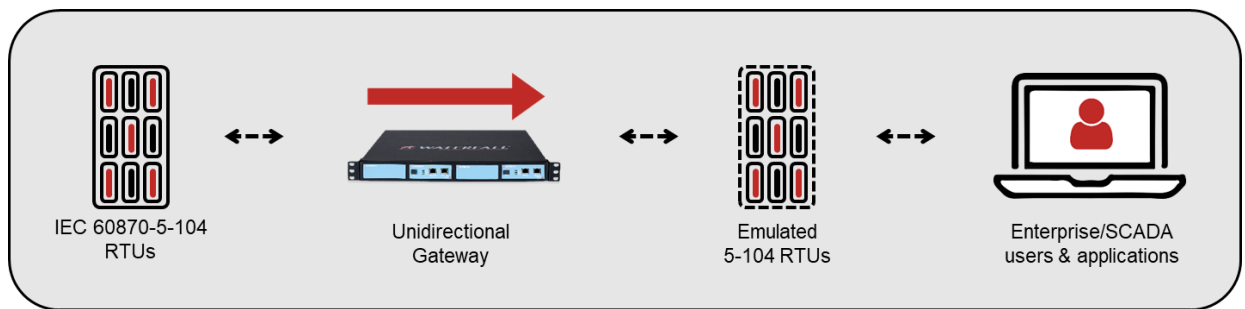
FULLY-FEATURED & ROBUST SUPPORT:

» Real-time replication of IEC 5-104 protective relays, RTUs, IEDs, and other IEC 5-104 equipment

» Replicates many IEC 5-104 devices on a single host

» Supports both IEC 5-104 master and slave emulation

» Supports all IEC 5-104 data types and point types

» 1 Gbps throughput standard & High Availability option

» Fully supported with Waterfall Unidirectional Security Gateway software

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ABOUT WATERFALL SECURITY SOLUTIONS

Waterfall Security Solutions is the global leader in industrial cybersecurity technology. The company's expanding portfolio of customers includes national infrastructures, power plants, nuclear plants, offshore oil and gas facilities, rail transport, refineries, manufacturing plants, utility companies, and many more. Deployed throughout North America, Europe, the Middle East and Asia, Waterfall products support the widest range of leading industrial remote monitoring platforms, applications, databases and protocols in the market. Please contact: info@waterfall-security.com