

PRODUCT BROCHURE

# UNIDIRECTIONAL SECURITY GATEWAY

**WF-500** 

Waterfall Unidirectional Security Gateways enable monitoring of industrial networks for operational needs without cyber risk. The gateways provide network perimeter protection with a hardware-enforced, physical barrier preventing remote attacks, malware, DOS attacks, ransomware and human errors originating on external networks.

### Protecting industrial sites since 2007













Rails

Oil & Gas

Manufacturing

SAFE IT/OT INTEGRATION

Seamless IT/OT network integration without introducing Internet-based cyber threats

### STRONGER THAN FIREWALLS

An evolutionary alternative to firewalls in a strong preventative cybersecurity program for Industrial Control Systems



### REDUCED DOWN-TIME

Ensure operational continuity by preventing plant shut downs and potential damage to plant assets, the environment and even human lives

### **IMPASSABLE PHYSICAL BARRIER**

A Unidirectional Gateway is a combination of hardware and software preventing cyber threats from propagating back into the protected network

### **PLUG-N-PLAY SOLUTION**

100+ software connectors on the market,

100% protection

from remote cyber threats



### Theory of Operation

Unidirectional Gateways replicate servers, emulate industrial devices and translate industrial data to cloud formats, enabling vendor monitoring, industrial cloud services, and visibility into operations for modern enterprises and customers. Waterfall's technology is a plug-and-play replacement for firewalls, without the vulnerabilities and maintenance issues that always accompany firewall deployments,.

Unidirectional Gateways contain both hardware and software components. The hardware components include a TX Module, containing a fiber-optic transmitter/ laser, and an RX Module, containing an optical receiver, but no laser. The gateway hardware can transmit information from a signaling system network to an external network, but is physically incapable of propagating any virus, DOS attack, human error or any cyber attack at all back into the protected network.

## HOW UNIDIRECTIONAL SECURITY GATEWAYS WORK



### CONNECT

the industrial network safely to the IT network



### **PROTECT**

the industrial network with hardware enforced technology



### REPLICATE

real-time operational servers to the enterprise IT network



### **Certification & Compliance**

- >> Certified: Common Criteria EAL 4+, ANSSI CSPN, NITES Singapore
- Assessed by: US DHS SCADA Security Test Bed & Japanese Control Systems Security Center Bed, Idaho National Labs, Digital Bond Labs, GE Bently Nevada Systems Labs, and NISA Israel
- Complies with: global ICS Standards & Regulations, NERC CIP, IEC 62443, NRC 5.71, NIST 800-82r2, CFATS, ISO, IIC SF, ANSSI, and many more.

#### **ABOUT WATERFALL SECURITY**

Waterfall Security Solutions is the global leader in industrial cybersecurity technology. Waterfall products, based on innovative Unidirectional Security Gateway technology, represent an evolutionary alternative to firewalls. The company's expanding array of customers includes national infrastructures, power plants, rails, nuclear plants, onshore and offshore oil and gas facilities, 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. For more information, visit www.waterfall-security.com

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