

# Waterfall Remote Screen View™

Cyber Security Solution for Remote Monitoring and Assistance



- Screens from industrial computers are visible in external networks
- Hardware-enforced: information flow towards the industrial network is physically impossible
- Eliminates cyber threats and risks
- Screens are accessed by conventional web browsers, using conventional video streaming applications
- Enables “escorted remote access” for untrusted vendor support
- Complies with NERC-CIP CIP-004 “Escorted Remote Access” interpretation
- No client software installation required
- Screen viewing is password protected
- Easy to install and maintain

## Overview

Waterfall Remote Screen View (RSV), a Unidirectional Security Gateway solution addresses the needs of critical infrastructures to remotely view server and workstation screens. Waterfall RSV maintains protects critical networks absolutely from network attacks originating on external networks, and so simplifies a compliance with regulations and standards.

## Features and Benefits

The Waterfall RSV uses an internal, hardware based, unidirectional fiber optic link to replicate in real time the contents of server and workstation screens from industrial networks to corporate networks or other external networks. Due to the design of the hardware itself, data flow from the corporate network towards the industrial network is physically impossible.

This preserves the industrial network segregation and protects critical assets as it eliminates any threats of cyber-attacks, incoming malware or human errors. At the same time, the solution allows remote, real time viewing of server and workstation screens located in the industrial network.

The Waterfall RSV provides maximum viewing versatility needed for effective monitoring and operational processes evaluation. It enables multiple users to remotely view, in real time, multiple screens located in the industrial network. Different users located in distant locations, can view multiple screens simultaneously. Moreover, a single user can monitor multiple screens on a single display.

Waterfall’s real-time screen feeds are hosted on a conventional password-protected web server. Users can access the feeds in standard web browsers, such as Microsoft’s Internet Explorer or Mozilla Firefox, using standard video streaming applications.

SCADA managers can configure the Waterfall RSV to stream screens continuously, on a pre-defined schedule, or following an external trigger.

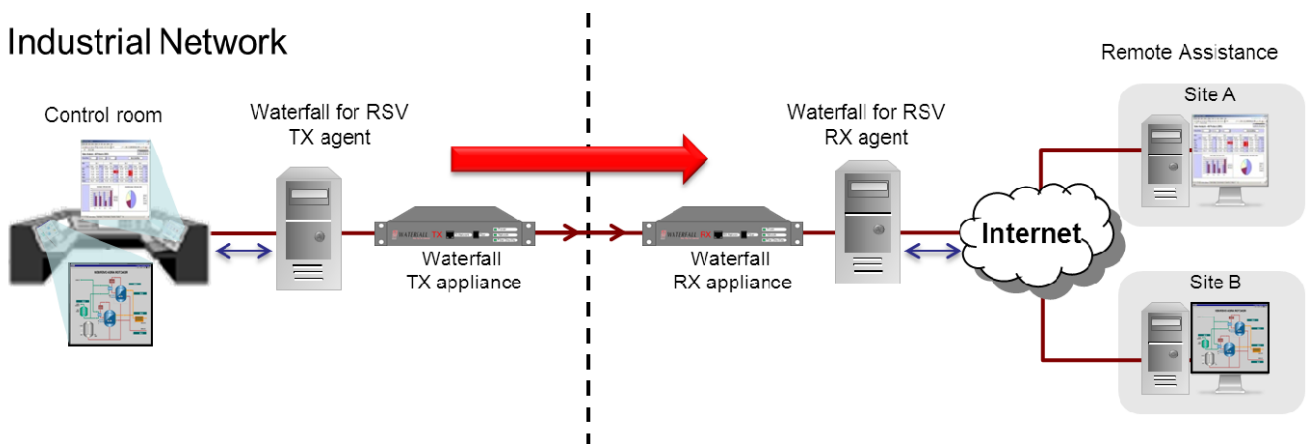
The Waterfall RSV solution supports gathering screens from Windows 2008, Windows 2003 and Linux operating systems. Waterfall RSV agent, installed at the "viewed" workstations, provides robust manageability and control, including configurable refresh rate, video quality, and activation mode.

The Waterfall Remote Screen View solution installs quickly and easily. Comprehensive diagnostics include real-time alarms that alert the user to fault conditions via email, SNMP, log files and PI tags.

### Escorted Remote Access for Remote Vendor Support

The Waterfall RSV solution complies with the recent NERC-CIP 004 v3 interpretation regarding "escorted remote access." The ruling points out that unauthorized remote personnel cannot directly access or control Critical Cyber Assets, even when supervised. However, remote personnel are permitted to provide advice to authorized, qualified local personnel in carrying out activities such as diagnosing or correcting problems.

The Waterfall RSV solution is used routinely to enable remote vendor personnel, such as call center personnel, the ability to see screens on critical computers and provide advice to site personnel in the diagnosis and repair of fault conditions. The service provided by the Waterfall RSV solution is equivalent in content and security to a remote video feed of screens being accessed by site personnel. Remote vendor personnel can provide advice over the phone, without having direct access to critical equipment.



### Specifications

<b>Network Interfaces:</b>	10/100 Base-T or 1000BaseT	<b>Power</b>	Single or Dual PS , 100-240V AC, 50-60Hz,
<b>Network Connector:</b>	Ethernet: RJ45 (CAT5)	<b>Power consumption:</b>	7W
<b>Management:</b>	Configuration and monitoring applications	<b>Dimensions:</b>	482 mm [19"] (W), 43.5mm [1U] (H), 253 mm (D) Rack-mount unit
<b>Alarms:</b>	User defined	<b>Weight:</b>	1.75 Kg
<b>Status Indication LEDs:</b>	Power (Orange) Network (Green) – Ethernet port is connected Fiber One-Way Active (Green)	<b>Temperature:</b>	Operating: 0° C to 50° C Storage: -10° C to 70° C
		<b>Humidity Range:</b>	0 to 95% at 45° C, non-condensing