FireWorks VESDA® Interface

FW-HSSX1

Description

The FireWorks-VESDA Interface is a High Level Interface (HLI) that integrates a new or existing VESDAnet network with EDWARDS life safety systems via the FireWorks Incident Management Platform. The interface acts as a supervised conduit for information exchange between supported VESDA devices on the VESDAnet network and the FireWorks platform.

This two-way communication provides FireWorks with real-time access to the status of networked VESDA detectors, and also the ability to control and reset these devices.

All VESDAnet detector events are automatically reported to the FireWorks system, and each event can have FireWorks programming associated with it. Status changes are reported to FireWorks within a few seconds of a detector reaching an alarm condition.

The FireWorks-VESDA Interface is a breakthrough solution that saves time and money. Instead of relay arrangements that require extra hardware, wiring, and programming to achieve communications with VESDA devices, the FW-HSSX1 acts as a communications gateway that is both simpler to install, yet offers more robust functionality.

A single interface module supports up to 100 VESDA detectors for process control, or 61 VESDA detectors for life safety applications. FireWorks supports up to 20 interface modules, offering scalability of up to 2,000 VESDA detectors on a FireWorks system.

Standard Features

- **Comprehensive and fully detailed event information**
  56 detector events and 105 sector events can be brought into FireWorks – more detail than relays and other interfaces.
- **Programmable event response**
  FireWorks can be programmed to trigger event responses based on VESDA status changes.
- **Saves time and money**
  Makes complex arrangements of relays and wiring unnecessary.
- **Scalable Investment**
  Provides direct access to as many as 2,000 VESDA detectors on a single FireWorks system.
- **Early Detection and Response**
  Brings the high sensitivity and installation benefits of aspirated detection to FireWorks network applications.
- **Integrated Life Safety**
  UL 864/ULC S527 Listed, FM Approved, CSFM Listed.
- **Enables “Big Picture” Incident Management**
  VESDA integration promotes situational awareness in the early stages of incident development, allowing response protocols to be deployed rapidly and effectively.
- **Versatile Solution**
  Supports multiple VESDAnet family detectors.
- **Responsive Command and Control**
  Data transfer allows quick and specific status updates, plus device control through FireWorks.
- **Reliable Operation**
  Fully supervised with ground fault detection.

Application

The FW-HSSX1 FireWorks-VESDA Interface is ideal for the integration of new or existing VESDA smoke detection networks with the FireWorks Incident Management Platform. With the early response characteristics of aspirated detection, FireWorks is better able to manage incidents in their early stages.

High-value and critical operations facilities such as data centers, electrical vaults, and manufacturing facilities are well suited to aspirating smoke detection.

New applications designed to include VESDA detection will benefit from FireWorks Incident Management and its situational awareness strengths. This takes into account information from many different sources and geographic locations to provide a big picture solution that may be missed with the information from the VESDAnet alone. In other words, the whole is greater than the sum of its parts.

With the FireWorks/VESDA integration, the solution yields a UL/ULC Listed/FM Approved end-to-end system. The system can be easily be configured to activate notification appliances or perform other functions based on inputs from the VESDAnet detectors.

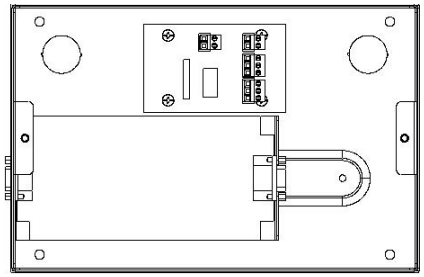
Note: When using the EDWARDS/Xtralis integration solution with existing VESDAnets that have VLP, VLS and/or VLC class detectors, each detector must be retrofitted with a VESDA XXX-YYY ground isolation kit and equipped with transient protection.

Supported Functionality

- Alarm Status
- Fault Status
- Smoke Level
- Detailed Fault Information
- Alarm Thresholds
- Detector Control including Reset, Disable, Silence, Alarm Test and Normalize
- Operational Status for processes such as Normalization and AutoLearn

Mounting

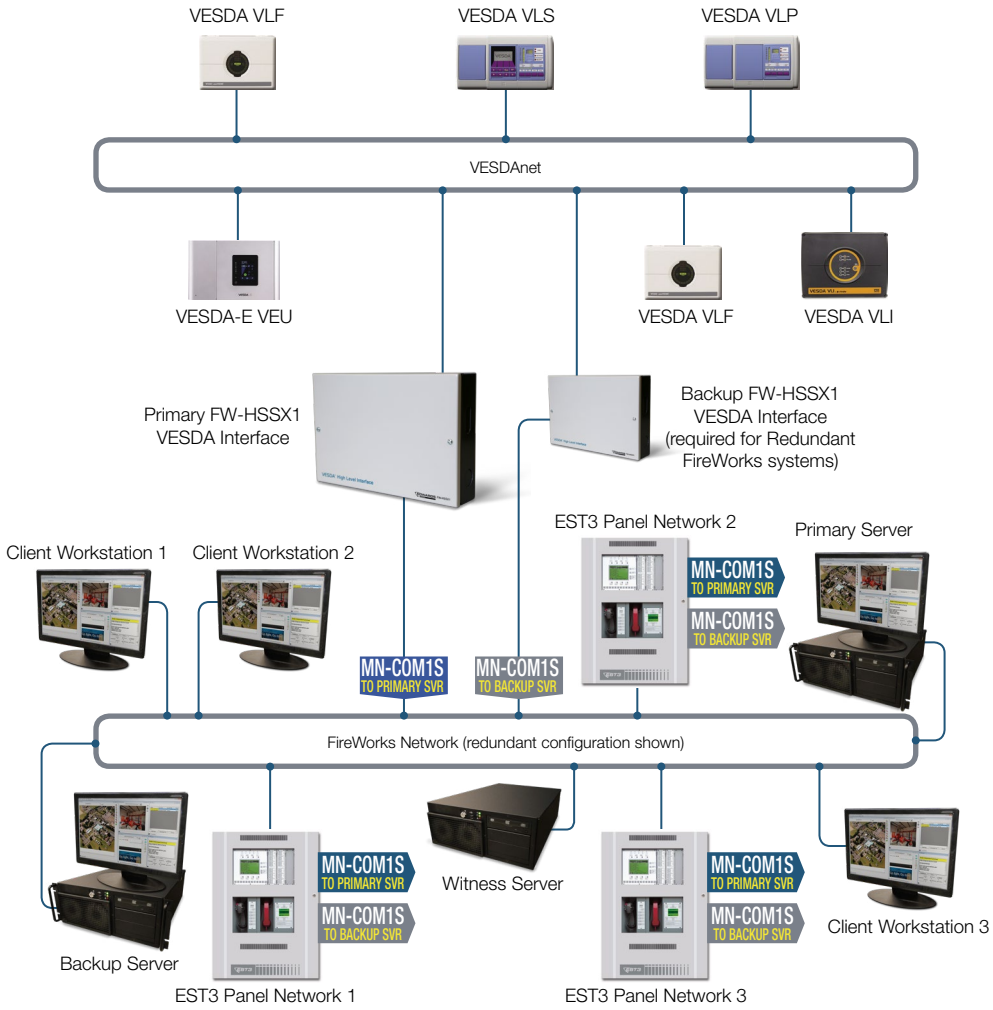
The FW-HSSX1 FireWorks-VESDA Interface is built into a NEMA 1 metal enclosure allowing for easy installation. Wiring lands on removable terminal strips. The FW-HSSX1 also has a ground fault enable/disable jumper.



Specifications

Power Consumption	1.68 W (Quiescent)
Supply Voltage	24 VDC
Current Consumption	70 mA (Quiescent)
Protocol Support	VESDA VLP, VLS, VLC, VLF, VLI and VFT-15 detectors; VESDA-E, and VEU detectors
Number of Detectors Supported	
For Life Safety	Up to 61 per Interface Module
For Process Control	Up to 100 per Interface Module
Dimensions (WHD)	11 in. x 7.3 in. x 2.2 in. (280 mm x 185 mm x 55 mm)
Weight	4.4 lbs (2.0 kg)
Supplied With	VESDAlink RS-232 9-way serial cable
Agency Listings	UL 864 9th Edition, ULC S527, FM Approved, CSFM Approved

Network Topology



Ordering Information

FW-HSSX1	FireWorks to VESDA High Level Interface Module with enclosure. Requires FW-HSSD5 or FW-HSSD20 software. UL/ULC for command/control. Maximum 61 VESDA detectors for Life Safety applications or up to 100 VESDA detectors for process control (non-Life Safety) per FW-HSSX1. 24 VDC.
FW-HSSD5	VESDA HLI Interface single software PIN code add-on. Enables connection of one (1) to five (5) VESDA HLI (FW-HSSX1) to FireWorks as nodes. Requires one FW-HSSX1 High Level Interface for each VESDA network if using Standalone or Non Redundant Server and two if using Redundant FireWorks Servers. Each server must have its own separate FW-HSSX1.
FW-HSSD20	VESDA HLI Interface single software PIN code add-on. Enables connection of one (1) to twenty (20) VESDA HLI (FW-HSSX1) to FireWorks as nodes. Requires one FW-HSSX1 High Level Interface for each VESDA network if using Standalone or Non Redundant Server and two if using Redundant FireWorks Servers. Each server must have its own separate FW-HSSX1.

Accessories

MN-COM1S	UL 864 Listed FireWorks Communications Ethernet Port, Command & Control. Comes with power and RS232 data cables.
MN-FNS4C2F3	4 Fast Ethernet (RJ45), 2 GB SFP, Layer 3 Lite. 24 VDC.
MN-FNS8C2F3	8 Fast Ethernet (RJ45), 2 GB Combo SFP/RJ45, Layer 3 Lite. 24 VDC.
MN-BRKT3	MN-FVP mounting bracket for APS-(6)(10)A power supplies
APS6A	Auxiliary/Booster Power Supply, 6.5A total, Expanded cabinet, 26a/h capacity, 115VAC