AUTOCALL

*UL, ULC Approved**

LifeAlarm Fire Alarm Systems

High Level Interface to VESDA Air Aspiration Detectors for 4100ES/4010ES Series Fire Alarm Control Panels

Features

Provides communications between Autocall fire alarm control panels and VESDA air aspiration smoke detection systems

Allows mission critical/high value applications to be advised of very low level smoke activity, facilitating early response

VESDA system communications include:

- Smoke obscuration threshold levels
- Air flow components status
- Detector head status
- Sensitivity settings

Fire detection panel features include:

- Panel operation can be programmed to recognize and categorize up to three smoke levels
- Information from up to 30 VESDA smoke detectors can be gathered on one communications input
- Can perform Reset, Enable, and Disable of each individual VESDA smoke detector
- UL listed to Standard 864

Compatible with:

- Autocall 4100ES and 4010ES fire alarm control panels
- VESDA models LaserPLUS (VLP), LaserSCANNER (VLS), LaserCOMPACT (VLC), and LaserFOCUS (VLF) air aspiration smoke detection systems

Introduction

Autocall/VESDA High Level Interface (HLI)

allows Autocall addressable fire detection panels to gather and process status information from VESDA high sensitivity air aspiration smoke detection systems. Hardware requirements include an Intelligent Interface Module installed in the fire alarm control panel, and an HLI Module and associated VESDA equipment installed in a separate enclosure.

Early Warning.

The combination of VESDA smoke detection and the extensive features of the Autocall addressable panel allows mission critical and high value facilities to be equipped with a low level smoke detection system that can provide very early warning of the presence of incipient fire conditions.

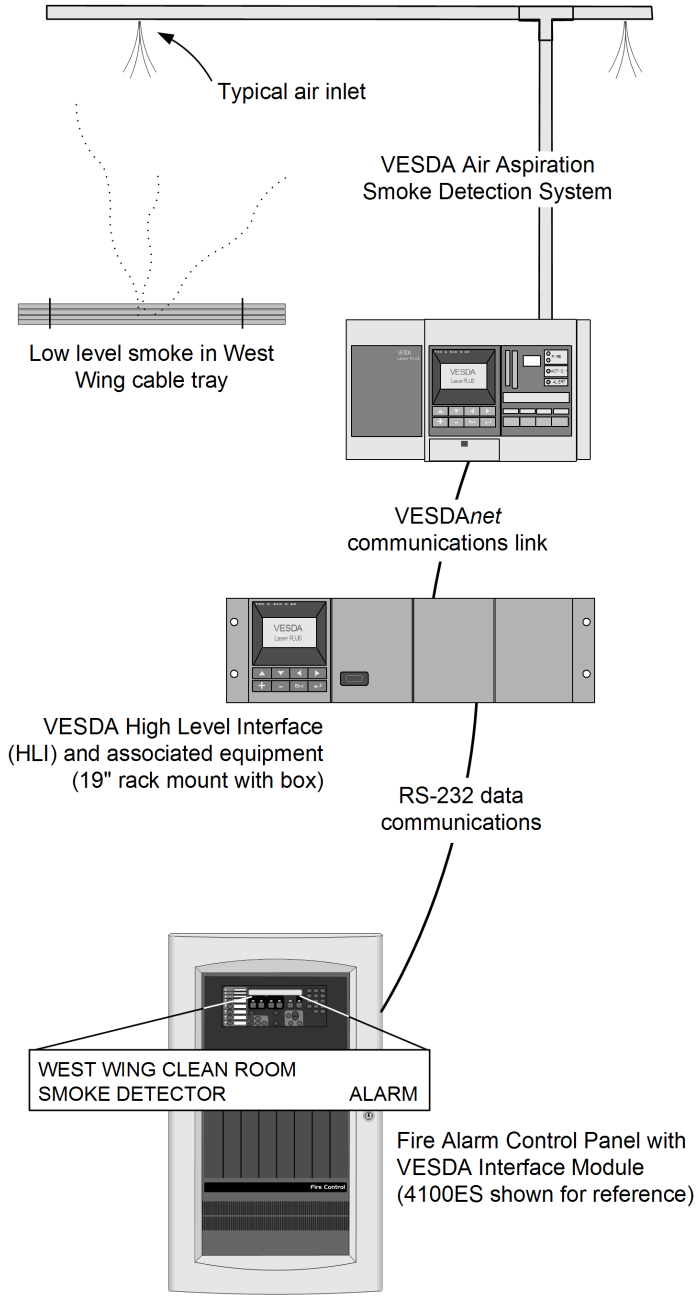


Figure 1: Autocall Control Panel Communicates with VESDA Smoke Detection Equipment via High Level Interface (HLI)

* Additional listings may be applicable; contact your local product supplier for the latest status.

Operation

With the Autocall/VESDA HLI communications link, individual VESDA smoke detectors are connected to the fire alarm control panel as remote addressable devices. This connection provides remote monitoring of the detector's locally displayed information and allows the panel to provide remote control for Reset, Enable, and Disable of the VESDA smoke detector.

VESDA Interface Applications

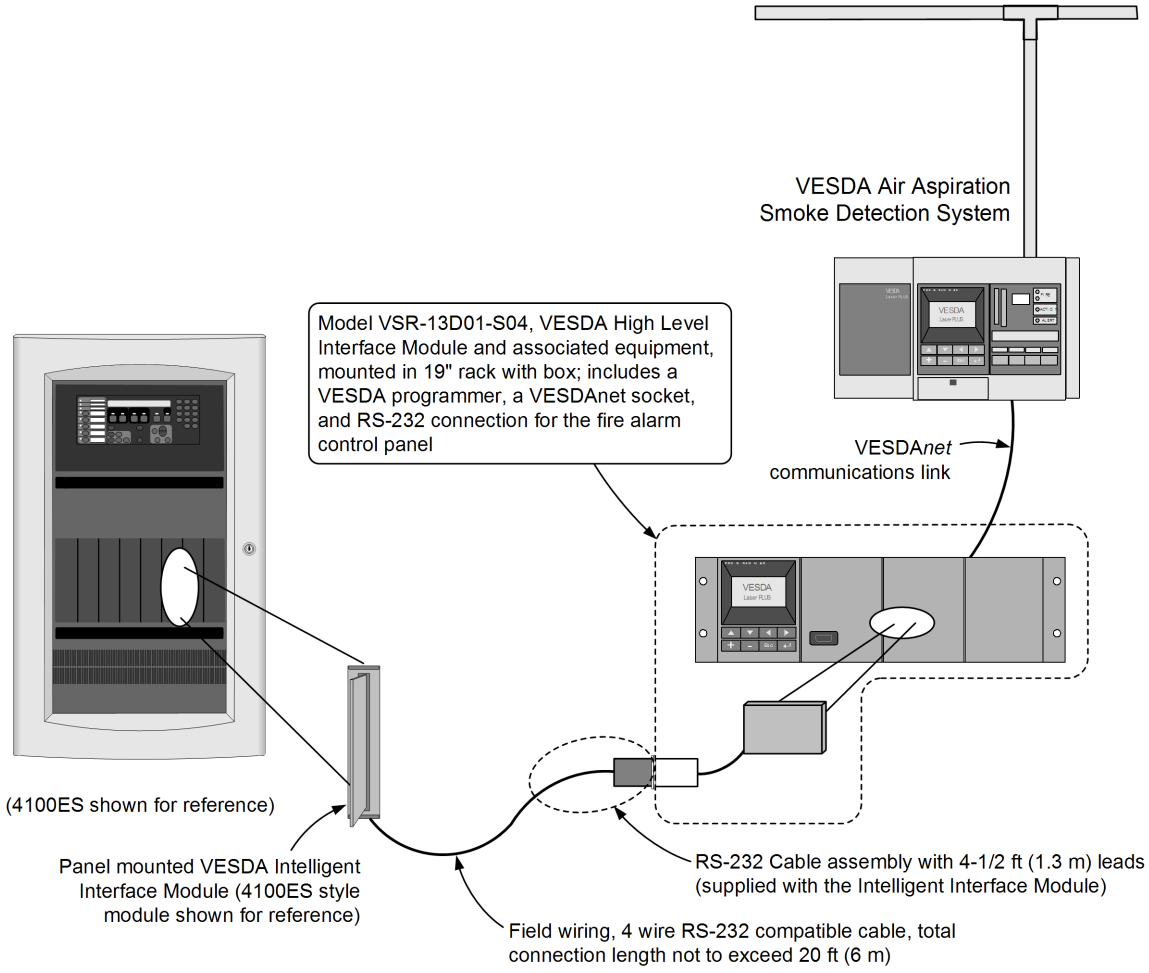
Mission Critical/High Value. All facilities containing people and material need to be adequately protected from smoke and fire. However, some facilities have missions that are extremely critical, as well as contents of inherently high value, and may benefit from integrating very early smoke detection into their facility fire detection panel.

Mission Critical. Typical examples of mission critical facility applications would be telephone switching stations, semiconductor clean rooms, computer rooms, and research laboratories. With such facilities, loss of operation can result in significant economic impact.

High Value. Other types of facilities such as libraries, archives, and museums may not be burdened by short periods of downtime, but their high value contents are priceless, irreplaceable objects that deserve extra protection.

At the earliest indication of a potential fire condition, these facilities need the ability to dispatch trained personnel to investigate and repair wiring problems or equipment malfunction. In some instances, saving a few seconds in response time may avoid extensive downtime or avoid smoke damage to delicate equipment or a priceless work of art

HLI Interconnection Information



VESDA Smoke Detection Summary

The VESDA air aspiration family of smoke detectors uses sophisticated combinations of air intake, air filtering, high intensity laser photoelectric sensing, and unique microprocessor applications to provide extremely early warning of incipient fire conditions. By linking the analog output of a VESDA smoke detection system to a compatible Autocall fire detection panel, it is possible to identify those conditions well before they become a problem. (A complete description of the extensive features available with VESDA systems is beyond the scope of this document. Please refer to the specific VESDA product literature for further details.)

Product Selection and Reference

Table 1: Fire Alarm Control Panel Reference

Fire Alarm Control Panel Model Series	SKU Number	Description
4100ES	A100-6048	Intelligent Interface Module, mounted in fire alarm control panel **Note:** Each Intelligent Interface Module reduces the addressable communications channel capacity by one (IDNet communications)

Table 2: Xtralis VESDA Smoke Detector Equipment Reference

SKU	Description
VSR-13D01-S04	Includes: VESDA High Level Interface board, a VESDA programmer, and a VESDAnet socket, all mounted in a 19" equipment rack within a mounting box
Additional VESDA Equipment reference	Order processing note: To order additional Xtralis products in Job Design, AOP query, use OPVIS or select vendor Xtralis. Refer to documentation supplied with the specific VESDA Smoke Detector Equipment for additional specifications and information. VESDA smoke detection systems are supplied by Xtralis: www.xtralis.com/VESDA

Specifications

Table 3: Autocall Control Panel Mounted Intelligent Interface Module

Specification	Rating
Voltage	18 to 32 VDC, from control panel
Current	132 mA
Communications	RS-232, 9600 baud, maximum distance is 20 ft (6 m)
Space Requirement	Pluggable module, requires 2" internal rack width (51 mm)
UL Listed Temperature Range	32° F to 120° F (0° C to 49 ° C)
Humidity Range	Up to 95% RH, non-condensing

Table 4: High Level Interface Module VSR-13D01-S04, Mounted in VESDA Smoke Detector

Specification	Rating
Voltage	20.4 to 32 VDC, from the VESDA Smoke Detector Equipment
Current	70 mA