DATA SHEET

# MODBUS HIGH LEVEL INTERFACE (P/N 68-517)


## Features

- Direct access and monitoring of the entire VESDAnet system
- Seamless data transfer
- Mounted in same room and within 20 feet (6.1 m) of the host control panel
- Easily configured using Xtralis configuring and monitoring software packages
- Compatible with Cheetah Xi and CyberCat control panels with Firmware version 7.2 or greater
- Can communicate with old and new VESDA detectors on the same VESDAnet
- Supports up to 100 VESDA detectors on a single VESDAnet network and still meet the response times required by UL 864 and NFPA 72

## General

The Modbus High Level Interface (HLI) is used to intelligently link VESDA devices connected to the VESDAnet with Fike's Cheetah Xi and CyberCat control panels. A single HLI can be connected to the host control panel via its dedicated RS232 connection. Through this connection, the HLI will transmit all VESDAnet events (e.g., current airflow status, smoke level status, fault status, etc.) intelligently to the control panel where it will be displayed and the panel will respond to the events based on system programming.

The HLI assembly consists of the following components:

- Steel enclosure with cover, painted grey
- Printed carrier circuit board with PC Link Modbus HLI attached
- Communication cable, HLI to host control panel

## Operation

The Modbus HLI allows each VESDA detector to report as a virtual address on the host control panel's addressable communication loop. This enables each detector to be independently programmed to the panel's "alarm only" zone, "suppression zone", or multiple zones of operation. The panel also make it possible for each detector to take part in functions such as cross-zone, count-zone, or single detector release in a suppression zone, or act as an early warning in an alarm only zone.

The HLI supports bi-directional communication to each Vesda detector. System control functions, such as Reset and Silence, can be initiated by each VESDA detector depending upon the detector type. The HLI allows the host control panel to supervise each Vesda detector for trouble (fault), pre-alarm or alarm conditions. Events are displayed on the host control panel and can also be displayed by Fike's computer graphics package Precise Vision®.

## Approvals

*For exact certification listings, please reference the respective agency web site.*

- Underwriters Laboratories (UL)
- Factory Mutual Approved (FM)
- New York Certificate of Approval (COA)
- California State Fire Marshal (CSFM)

## Specifications

| Enclosure (box and cover plate) | |
|---|---|
| Material | 16 gauge carbon steel |
| Finish | Gray polyester powder coat |
| Knockouts | All four sides |
| Weight | 6.8 lbs. (3.08 kg), with electronics |
| Mounting | Surface or recess |
| **HLI** | |
| Current | 101 mA (standby and alarm) [1)] |
| Power | 18-30 Vdc [2)] |
| Operating temperature | 32 - 120°F (0 - 49°C) |
| Humidity | 93% relative |
| Panel connection | 20 ft (6.1 m) RS232 serial communication cable, RJ11 connector |
| VESDAnet connection | Class A wiring<br>Belden 9841 wiring or equivalent<br>100Ω maximum impedance<br>100 VESDA detectors maximum |
| Compatible detectors | VLC, VLP, VLS, VLF, VLI, VFT-15, VEP, VEP-1, VEP-2, VEU, VEA-40, VEA-60, VEA-80, VEA-100, VEA-120 and VES |

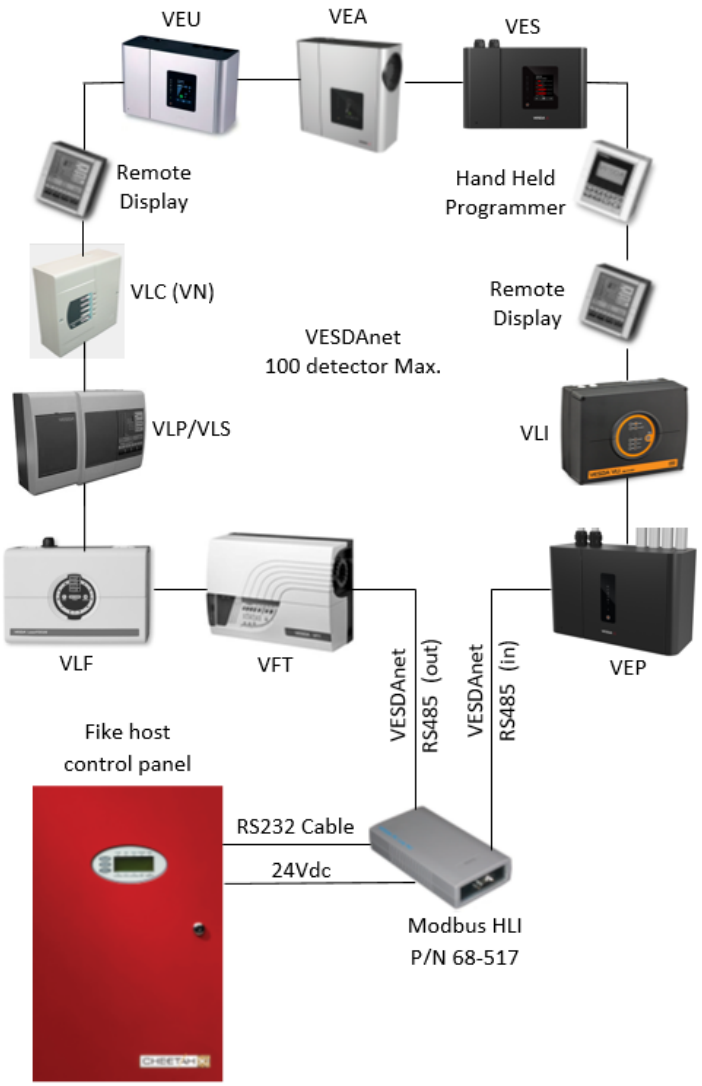
1) Includes current draw of HLI and carrier board.
2) Supplied by host control panel or separate (standalone) power supply capable of ground fault detection and that has a ground fault relay that can be monitored by the host control panel.

## Ordering

| Part Number | Description |
|---|---|
| 68-517 | Modbus HLI Assembly (includes enclosure, HLI, carrier board and interface cable) |
| 10-2946 | HLI Carrier Board |
| VHX-0420-FIK | Xtralis Modbus HLI |
| 02-4551 | HLI Enclosure, Gray |
| 02-15802 | RS232 Interface Cable, 20 feet (6.1 m) long, RJ11 connection |

## Typical VESDAnet Connection

The Fike PC Link HLI can be connected at any point on the VESDAnet network within 4000 ft. (1219 m) of the VESDA devices it's connected to.



## HLI Enclosure Dimensions