

# VESDA Modbus Type 3 HLI

VHX-0420 Standard  
VHX-1420 Wall Mounted



## VESDA Modbus Type 3 High Level Interface

The VESDA Modbus Type 3 High Level Interface (HLI) integrates VESDAnet<sup>1</sup> network with host monitoring platforms such as Building Management Systems (BMSs) and Fire Alarm Control Panels (FACPs).

The Modbus Type 3 HLI acts as a proxy for all VESDA devices on the VESDAnet network, providing access to the rich status information that is available from VESDA detectors as well as the ability to control and configure these devices. Alarms are reported to the host within a few seconds of a detector reaching an alarm condition. Exact performance is dependent on the polling strategy and size of the monitored network. The Modbus Type 3 HLI is able to support up to 100 VESDA detectors on a single VESDAnet network.

The VESDA zone equates to the Modbus address field and allows the host to retrieve the overall status of the VESDAnet network as well as performing certain VESDA device configuration updates. The host is able to monitor and control VESDA devices on the VESDAnet network by reading and writing into registers in the Modbus map.

### VHX-1420 Wall-Mounted Modbus Type 3 HLI

The wall-mounted version is housed in a metal enclosure allowing for permanent mounting on a flat surface. With a built-in VESDAnet interface you don't need a remote VESDAnet socket module making the wall-mounted HLI a cost effective solution to your interface requirements.

### VHX-0420 Modbus Type 3 HLI

A standard unit used to provide a flexible solution where permanent mounting is not required. In this case a VESDAnet socket interface is required to connect the HLI onto the VESDAnet network.

## Features

- Direct access and monitoring of your entire VESDAnet system
- Seamless data transfer
- Easily configured using Xtralis configuring and monitoring software packages

## Listings/Approvals

VESDA HLIs are recommended for secondary monitoring of fire alarms and other notifications from a VESDAnet network.

When used for primary reporting, the VESDA HLI must be listed as part of an approved fire system which is compliant to local codes and standards.

## Protocol Supports

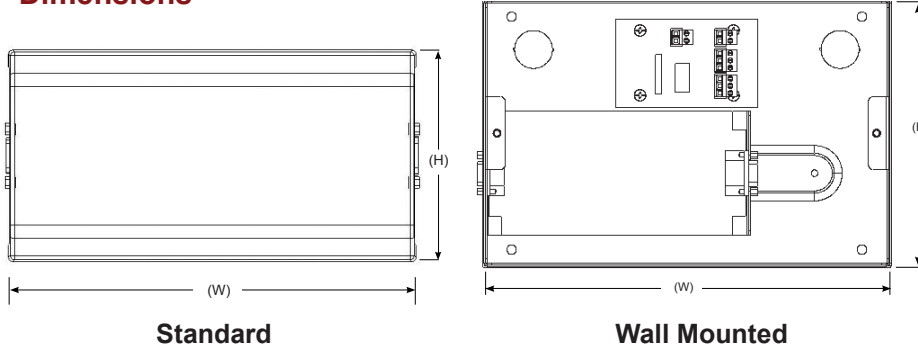
- VESDA VLP, VLS, VLC, VLF, VLI and VFT-15 detectors
- VESDA-E VEP, VEU and VEA detectors
- Alarm Status
- Fault Status
- Smoke Level
- Detailed Fault Information
- Alarm Thresholds
- Detector Control including Reset, Disable, Silence, Alarm Test and Normalise
- Operational Status for processes such as Normalisation and AutoLearn

<sup>1</sup> VESDAnet is a propriety communications protocol allowing your VESDA range of smoke detectors, displays, programmers and remote units (collectively known as devices) to communicate with each other on the one network. VESDAnet is a fault tolerant bi-directional protocol. This means that if one direction of communication fails, then your VESDAnet messages are transmitted in the opposite direction.

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## Dimensions



## Specifications

**Power Consumption:**  
1.68 W (Quiescent)

**Supply Voltage:**  
24 VDC

**Current Consumption:**  
70 mA (Quiescent)

**Number of Detectors Supported:**  
Up to 100 detectors

### Standard:

**Dimensions (WHD):**  
188 mm x 98 mm x 40 mm  
(7.4 in. x 3.9 in. x 1.6 in. approx.)

**Weight:**  
0.4 kg (0.9 lbs)

**Supplied With:**  
VESDALink RS-232 9-way serial cable  
(male-female).  
VESDAnet RS-485 15-way cable  
(male-female)

### Wall Mounted:

**Dimensions (WHD):**  
280 mm x 185 mm x 55 mm  
(11 in. x 7.3 in. x 2.2 in. approx.)

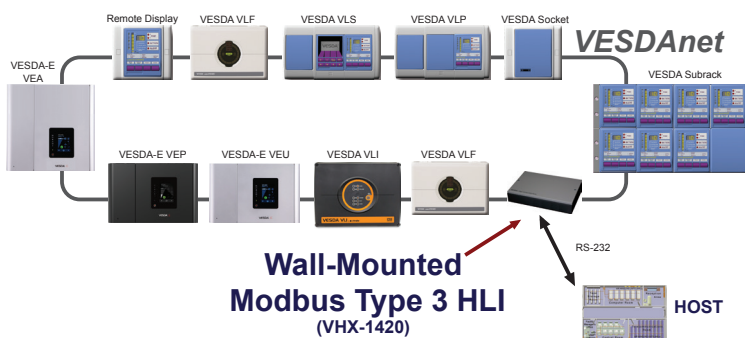
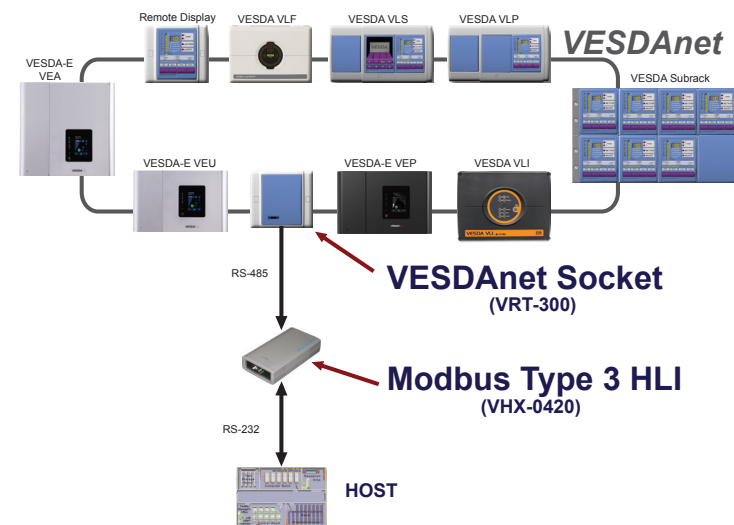
**Weight:**  
2 kg (4.4 lbs)

**Supplied With:**  
VESDALink RS-232 9-way serial cable  
(male-female).

## Product Warranty

2 years

## Example VESDAnet system with Modbus Type 3 HLI



## Ordering Information

### Product

VESDA Modbus Type 3 HLI Standard  
VESDA Modbus Type 3 HLI Metal Box Wall-mounted  
VESDALink RS-232 9-way serial cable  
VESDAnet RS-485 15-way cable

### Part number

VHX-0420  
VHX-1420  
VSP-509 (Spare part)  
VSP-511 (Spare part)

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