

PC-Link HLI

The PC-Link HLI (High Level Interface) is a device that connects an external device to VESDAnet. It provides a window to the current state and condition of VESDA devices connected to VESDAnet. A RS232 data cable connects the PC-Link HLI to a PC or an external device such as a fire control panel. A RS485 cable connects the PC-Link HLI to a VESDAnet Socket.

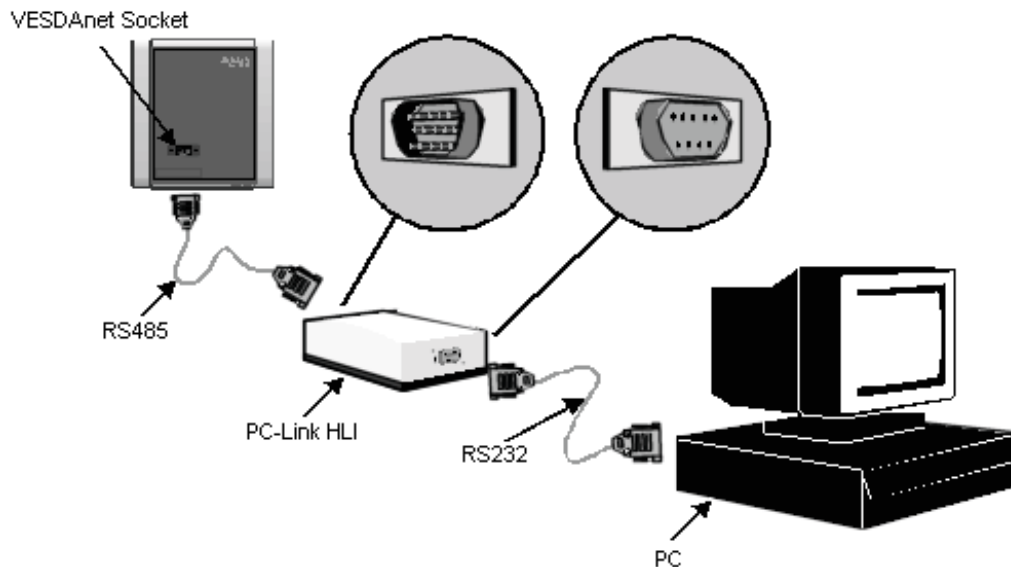


Figure 7 - PC-Link HLI connecting to VESDAnet Socket and PC

Several models of the PC-Link HLI are available

- PC-Link HLI - Sliding Windows (VHX-0200)
- Wall Mounted PC-Link HLI - Sliding Windows (VHX-1200)
- PC-Link HLI - Open Protocol Peer to Peer (VHX-0300)
- PC-Link HLI - Open Protocol Master/Slave (VHX-0310)

PC-Link HLI - Sliding Windows

The PC-Link HLI - Sliding Windows communicates between devices on VESDAnet and PC software developed by VESDA (VConfig PRO and VSM3). The proprietary protocol used by the PC-Link HLI - Sliding Windows is designed to accommodate upgrades and new software.

Wall Mounted PC-Link HLI - Sliding Windows

The wall mounted PC-Link HLI provides the same functions as the PC-Link HLI - Sliding Windows. In addition, it provides direct permanent connection to VESDAnet via a VESDAnet interface card. It can be mounted on a wall at a remote location away from a detector.

PC-Link HLI - Open Protocol

The PC-Link HLI - Open Protocol is designed to link VESDAnet to software developed by other vendors and by OEM manufacturers. It is used to interface VESDAnet with fire control panels or fire suppression systems. Contact your local VESDA office for further information.

Local codes and standards must be complied with when using PC-Link HLI as a primary reporting device.

The PC-Link HLI - Open Protocol can operate in two modes:

Peer to Peer Mode

The VHX-0300 PC-Link HLI operates in the peer to peer mode. It reports the current VESDA Zone's status in this mode. The PC-Link HLI can be configured to report on current airflow status, fault status and display status messages. Both the host and the HLI can initiate communication. The open protocol is capable of operating with the LaserSCANNER detector. It can report the first alarm sector and identify the sector in which this was raised. Large VESDAnet installations will generate excessive data transmission. To reduce the traffic to the minimum, unsolicited transmission of messages can be configured to allow only current address status messages.

Master/Slave Mode

The VHX-0310 PC-Link HLI operates in the master/slave mode. In this mode the host requests for information and the HLI responds with the relevant data. No unsolicited data is transmitted by the PC-Link HLI. The host may be a PC, or a fire control panel.

Command Name	ID	From → To	Description
Set operation	1	HOST → HLI HLI → HOST	Set the operating message set. This is recorded in volatile memory (If set to master/slave operation buffers shall be reset (cleared) to guarantee synchronization).
Get operation	2	HLI → HOST	Get the operating message set.
Response	3	HOST → HLI HLI → HOST	Universal indicator of success/failure.
Address update	4	HOST → HLI	Request for an update of an address's status.
Current address Status ¹	5	HLI → HOST	An address's present status.
Remote operation	6	HOST → HLI	Allows an address to be reset, isolated or silenced.
HLI refresh	7	HOST → HLI	Clear the data stored locally on the high level interface.
Create display	8	HOST → HLI	Request the information required to create a virtual display.
Display info	9	HLI → HOST	The information required to create a virtual display.
Update display status	10	HOST → HLI	Request for data required to update a virtual display.
Current display status ¹	11	HLI → HOST	A display's status.
Update fault status	12	HOST → HLI	Update the fault status of an address.
Current fault status ¹	13	HLI → HOST	The current fault status of an address.
Get fault string	14	HOST → HLI	Get the fault string used by VESDA by providing the fault number.
Fault string	15	HLI → HOST	The fault string associated with a fault number.

Command Name	ID	From → To	Description
Current airflow status ¹	17	HLI → HOST	A address's airflow status.
HLI enquiry	20	HOST → HLI	Request HLI information.
HLI sign on	21	HLI → HOST	HLI data e.g. Version number.
Get device type	22	HOST → HLI	Get a device type.
Current device type	23	HLI → HOST	Current device type.

1. The HLI can be configured to send these messages as unsolicited messages to the HOST.

Table 1 - Command ID Summary