DATA SHEET

MODBUS HIGH LEVEL INTERFACE (HLI)

APPROVALS:

- UL
- FM

DESCRIPTION

The Fike High Level Interface (HLI), P/N 68-517 is used to intelligently link Xtralis VESDA® devices connected to the VESDAnet with Fike's Cheetah® Xi and CyberCat® control systems. A single HLI can be connected to the host control panel via its 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. The control system will respond to the VESDA events based on the systems configuration. For more detailed information on configuration and general operation refer to manual 06-823.

OPERATION

The Modbus HLI allows each VESDA detector to report as a virtual address on the control panel's addressable communication loop. This allows each detector to be independently programmed to the panel's "alarm only" zone, "suppression zone", or multiple zones of operation. The panel also allows 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. Each Vesda detector is supervised and any trouble (fault), pre-alarm or alarm condition occurring at a VESDA detector is reported and displayed on the control panel. This information can also be displayed through Fike's computer graphics package Precise Vision® as well. Operator functions such as reset and silence can be initiated on the panel as well as performed at each VESDA detector depending upon detector type.

COMPATIBILITY

The Modbus HLI is compatible with Cheetah Xi and CyberCat control panels with firmware version 7.20 or higher. The Modbus HLI is backward compatible with older VESDA detectors (i.e., VLP, VLS, VLC, VLF) and can communicate with additional VESDA detectors (i.e., VLF, VLI, VFT) and the new generation VESDA E detectors (i.e., VEU, VEP, VEA) on the same VESDAnet.

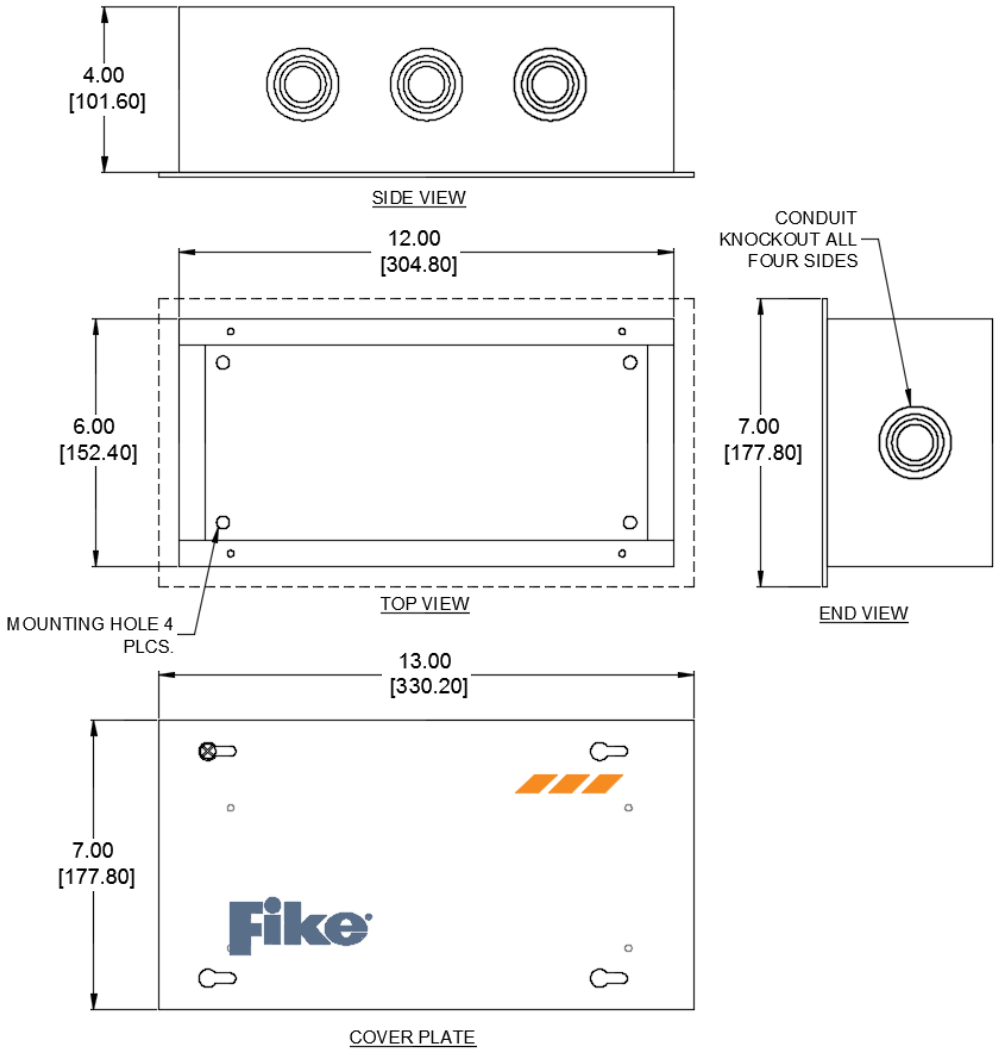
Up to 200 total VESDA devices can be connected to the VESDAnet network; however, the maximum number of VESDA detectors that can be connected to the network is limited to 100. This ensures that each detector that is being monitored by the Cheetah Xi or CyberCat control systems can meet the device response time requirements of UL standard 864 and NFPA 72.

ORDERING INFORMATION

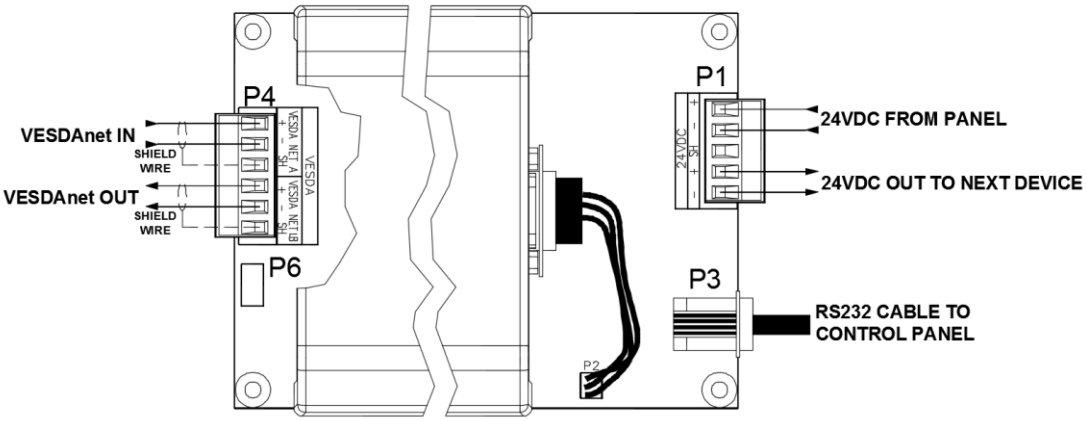
Part Number	Description
68-517	Fike Modbus High Level Interface (HLI) Assembly
10-2946	HLI PCB Assembly only(included in 68-517)
VHX-0420-FIK	PC Link HLI(included in 10-2946)
02-4551	HLI Enclosure(included in 68-517)
02-15802	HLI (RS232) Serial Interface Cable (included in 68-517), 4 conductor, 20ft. (6.1 m)

PHYSICAL ENCLOSURE SPECIFCIATIONS

- 16 GUAGE LOW CARBON STEEL
- Grey polyester powder coat finish
- Concentric knockouts on all four sides
- Keyhole slotted cover plate
- Weight: 6.8 lbs.(3.08 kg), with electronics installed



ELECTRICAL SPECIFICATIONS



TERMINAL	DESCRIPTION	SPECIFICATION DETAILS
P1 – 24VDC + - SH + -	24VDC power Input/Output Power-limited and supervised	101 mA @ 18-30 VDC (standby and alarm) Power for the VESDA High Level Interface must come from the power supply on Fike Control Panel or a ground fault could result. Wiring 16AWG minimum, THHN Terminal block accepts 12 AWG–16 AWG
P3 **Panel Connection**	RS232 communication to single HLI Non-power-limited and supervised	20 ft. (6.1 m) maximum cable length between Fike control panel and HLI located in same room. Cable must be in conduit or equivalently protected against mechanical injury. Fike supplied serial communication cable (P/N 02-15802), 20 ft. (6.1 m) in length
P4 - VESDA A+ A- SH B+ B- SH	VESDAnet connection Incoming/Outgoing RS485 non-power-limited and supervised	Class X VESDAnet pathway only Shielded twisted pair cable (Belden 9841 wiring or equivalent), 100Ω maximum impedance 4000 ft. (1219 m) maximum between two VESDAnet devices Maximum 100 VESDA detectors
P6	HLI ground fault isolation jumper	Remove to disconnect earth ground fault reference from HLI. Used for legacy systems only (VLC, VLP, VLS).