Principle of Operation

The HAWK H2100 distance-read leak detection controller monitors up to 5,000 feet (1,524 meters) of sensing cable. Robust and web-accessible, it is compatible with all C-HAWK sensing cables and the SD-Z spot detector.

Designed to monitor large facilities and complex leak detection networks, the H2100 can be configured as a Modbus master in systems with multiple HAWK leak detection controllers. It can easily integrate into existing facility monitoring systems and can be configured for direct notification via email. The H2100’s firmware includes a user configurable map which, when a leak is detected, will visually indicate the location of the leak on the map.

The H2100 is ideal for monitoring large leak detection networks, facilities with raised floors, museums, libraries, data centers, clean rooms, telecommunication centers, and other critical areas.

Note: The H2100 requires an isolated power supply. A power supply is not included with the H2100. Purchase either HAWK power supply PSWA-DC-24 or HAWK’s LD-ENC.

Features

- Monitors up to 5,000 feet (1,524 meters) of sensing cable and/or spot detectors
- Interactive web-based leak detection map – avoid costly damage and downtime with fast leak notification
- Adjustable leak, delay, and contamination thresholds
- Identify cable disconnects & breaks
- Thirty-two configurable zones allow users to label unique areas for quick identification
- SNMP, Modbus, BACnet, and summary relay output allow for simple integration with BMS, NMS, & BAS
- SMTP (email) notification of alarm conditions
- Audible alarm
- No factory calibration required
- Annunciate multiple, simultaneous, leaks when other distance-read controllers are integrated into the system

Included Equipment

- H2100 controller, leader cable, end-of-line (EOL) terminator

Additional Requirements

- Isolated HAWK power supply, sensing cable (as needed for application), network cable

Power

- Requires an isolated power supply.
  - 24VDC Isolated @ 600mA max., 50/60Hz; requires HAWK power supply PSWA-DC-24 (not included)
  - 100/120/230-240VAC @ 500mA max., 50/60Hz; requires HAWK LD-ENC enclosure (not included)

Output

- 1 Form C summary relay, 1A @ 24VDC, 0.5A resistive @ 120VAC; configurable for latched or non-latched; 240VAC as a standard for M.E

Inputs

- Leak Detection Cable: Compatible with C-HAWK sensing cable (not included)
- Cable Input: Requires 15ft (4.6m) leader cable and EOL terminator (included)
- Maximum Length: 5,000ft (1524m) of leak detection sensing cable
- Minimum Length: 35ft (11m)
- Detection Accuracy: ± 2ft (0.6m) +/- 0.5% of the cable length
- Detection Repeatability: ± 2ft (0.6m) +/- 0.25% of the cable length
- Detection Response Time: When used with sensing cable,
Overview

H2100
Distance-read Leak Detection Controller

Communication Ports
• Ethernet: 10/100BaseT, full/half duplex RJ45 connector; 500VAC RMS isolation
• EIA-232: DB9 female connector; 9600 baud; 8 data bits, no parity, 1 stop bit
• EIA-485: 9600, 19200, 38400, or 56700 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit

Protocols
• TCP/IP, HTML, TFTP: IPv4.0; webpages comply with Rehabilitation Act of 1973, sections 504 and 508, US Dept of Education (website accessibility for computer users with disabilities)
• SNMP: V1: V2C MIB-2 compliant; NMS Manageable with Get, Set, Traps: V3 optional
• SMTP (Email): Supports Client Authentication (plain and login); compatible with ESMTP Servers
• Modbus (EIA-485): Slave; RTU mode; Supports function codes 03, 04, 06 and 16 Master; RTU mode for integration with HAWK’s LD5200, H2100, and LD1500 products; Johnson N2
• Modbus TCP/IP UDP/IP: Modbus Slave; TCP/IP transmission protocol Modbus Master; TCP/IP transmission protocol for integration with HAWK’s H2100 and LD1500 products
• BACnet/IP: ASHRAE STD 135-2004 Annex J
• BACnet MS/TP: EIA-485
• BACnet Alarms: Automatically reports to a single destination
• Terminal Emulation (EIA-232): VT100 compatible

Alarm Notification
• Visible Alarm: Green, alphanumeric, dot matrix LED display; bi-color status LED
• Audible Alarm: 70dBA @ 2ft (0.6m); re-sound configurable (disabled, 0-24 hours)
• Email (Ethernet): 4 email recipients; email sent on Alarm and Return to Normal; each alarm notifies all email recipients
• SNMP Traps (Ethernet): 4 Community Strings

Logging Capabilities
• Event Log: Last 500 events
• Trend Log: Cable current level once daily for the last 288 days

Login Security
• Web Browser Access (Ethernet): Web password Read Only: 1
• Web password Read/Write
• Terminal Emulation Access: None

Front Panel Interface
• Display: Green alphanumeric dot matrix display
• Push Buttons: Test/Reset: 1
• LED Indicators: Power/Status: 1 bi-color (Power On: green; Alarm: red)

Operating Environment
• Temperature: 32° to 122°F (0° to 50°C)
• Humidity: 5% to 95% RH, non-condensing
• Altitude: 15,000ft (4,572m) max.

Storage Environment
• -4° to 185°F (-20° to 85°C)

Dimensions & Weight
• 8"W x 4.25"H x 1.25"D (203mmW x 108mmH x 32mmD)
• 1.5 lbs. (680g)

Mounting
• Panel mount Type 1 enclosure

Related Products
• Conductive Fluid Sensing Cable
• Chemical Sensing Cable
• LSZH Sensing Cable
• Leader Cable and EOL
• PSWA-DC-24
• SD-Z
• Wall Mount Enclosure
• Non-Sensing Cable
• X-Connector
• Weighted Cable
• Connector
• Framed Referenceb Map
• J-Clips
• Caution Tags

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