

# Two-Wire Addressable Duct Detectors

## • DXP-AD2

### Description

DXP-AD2 Series Smoke Duct Detector is the latest analog addressable innovation for early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications. The unit is designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down via the AsBuilt IPF Series™ fire control panel in the event of smoke detection.

The DXP-AD2 connects to the SLC loop monitored and controlled by the AsBuilt ALM module. The DXP-AD2 is addressed through the use of the patented XPERT™ programming card. The ALM monitors the SLC for faults and troubles and reports the DXP-AD2 status to the IPF fire control unit. When an alarm condition is reported to the IPF system by the DXP-AD2, pre-programmed output events energize DXP-OCM output control modules associated with the specific DXP-AD2 to take control of required building functions.

The DXP-AD2 is designed and built to meet all local code requirements, as well as the NFPA and ICC standards regarding HVAC supply and return duct smoke detectors. Output terminals are provided for a remote alarm indicator accessory.

The DXP-AD2 includes many features that represent true innovations from current generation duct smoke detectors.

The DXP-AD2 is shipped complete with a 7" exhaust tube, sampling tube end cap, a mounting template and mounting hardware.

The DXP-AD2 has a number of accessory products including the MSR-50 and MSR-100 remote indicator/controls, a weatherproof enclosure and TG-2000 test gas.

- Models: Photo DXP-AD2-P (Model SL-DAA-P)  
Ion DXP-AD2-I (Model SL-DAA-N)
- Sampling Tubes: STN:-1.0 12" or less  
STN:-2.5 6" to 2.5'  
STN:-5.0 2.5' to 5"  
STN:-10.0 5.0' to 10'
- Air Velocity: 100-4000'/min.
- Humidity: 10-95% RH Non-Condensing/Non-Freezing
- Wiring: Solid or Stranded #12 to #22 AWG terminals
- Dimensions: 13.5 L x 4.5 W x 2.25 H
- Max. Net Weight: 2 lbs.




### Features

- Listed for velocities between 100-4000 ft./min
- Listed for high- temperature applications
- Patent pending "No-Tools Required" front or rear loading and removing sampling/exhaust tubes
- Patent pending "Test Port Valve" allows for aerosol smoke testing without cover removal
- Clear cover fitted with four captive "No-Tools Required" thumbscrews
- Instantaneous cover removal trouble indication
- Vertical terminal block for easier wiring
- External mounting tabs do not require cover removal to install
- Duct wall gaskets on back of enclosure are pre-installed
- Large terminal connection screws
- Compatible with the WP-2000 weatherproof enclosure

### Listings

UL File: S2829  
CSFM: 3240-1004:115  
MEA Accepted: 73-92-E Vol. 35

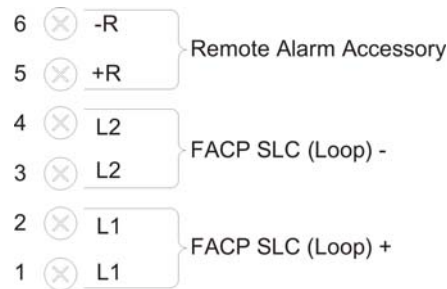
Product	Data Sheet Number	Rev/Revision Date	
Two Wire Addressable Duct Detectors	2401	1.3/ 5/1/2009	

**Engineer Specification**

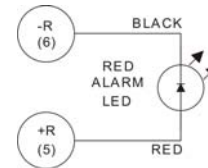
The contractor shall furnish and install, where indicated on the plans, ionization or photoelectric type duct detectors for the control of air handling units by the Fire Alarm control. The addressable analog duct detector will contain the patented XPERT programming card for ease of addressing. The addressable analog doctor shall also be capable of handling air velocities of 100 to 4000 feet per second, the detector head shall contain no additional screens or filters, a method of smoke testing the detector without removing the duct detector cover must be provided, cover and sampling tube or installation shall not require the use of tubes and sampling tubes must be capable of installation or removal from the front and rear of the detector for inspection and testing. The addressable analog duct detector shall be UL listed and UL listed as compatible with the AsBuilt IP Fire Series network fire controls. The analog addressable duct detector shall be the AsBuilt model DXP-AD2-P (photo) and DXP-AD2-I (ion).

**Wiring Detail**

**Terminal Connections**



**Remote Accessory Wiring**



**Ordering Information**


Part Number	Data Sheet	Description
DXP-AD2-P	2401	Two Wire Photo Analog Addressable Duct Detector (SL-DAA-P)
DXP-AD2-I	2401	Two-Wire Ion Analog Addressable Duct Detector (SL-DAA-N)

**Related Modules**

DXP-AD4R-P	2402	Four- Wire Photo Analog Addressable Duct Detector (SL-DA4R-P)
DXP-AD4R-I	2402	Four-Wire Ion Analog Addressable Duct Detector (SL-DA4R-N)
MSR-50	2410	MS-50 Advanced Remote Accessories
MSR-100	2412	MS-50 Advanced Remote Accessories
Accessories	2416	MS Remote Accessories
WP2000		Weatherproof Enclosure
TG2000		Test Gas

**Related Data Sheets**

**IP Fire Series™ Intelligent Fire Controls:** 1000-1055  
**Discovery Detectors:** DISC-P, 2106; DISC-I, 2107; DISC-T, 2108; DISC-M, 2109  
**XP Detectors:** XP-P, 2101; XP-I, 2102; XP-T, 2103; XP-M, 2104  
**Addressable Base Options:** All Bases, 2310

Product Name	Data Sheet Number	Rev/Revision Date	
Two Wire Addressable Duct Detectors	2401	1.3/ 5/1/2009	
<b>As Built Engineered Systems, Inc.</b> 1451 Concord Street Framingham, MA 01701-7782 USA	Phone: (508) 788-8333 Fax: (508) 788-8334 Contact: <a href="mailto:info@asbuiltes.com">info@asbuiltes.com</a> Visit: <a href="http://www.asbuiltes.com">www.asbuiltes.com</a>	