



IS819

Analog Addressable Duct Smoke Detectors

Harrington Signal Inc.

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Product Description

IS819 Analog Addressable duct smoke detectors provide early detection of smoke and products of combustion present in air moving through an HVAC duct. These devices are designed for prevention of smoke re-circulation in areas by the air handling systems. Fans, blowers, and complete systems may be shut down in the event of smoke detection.

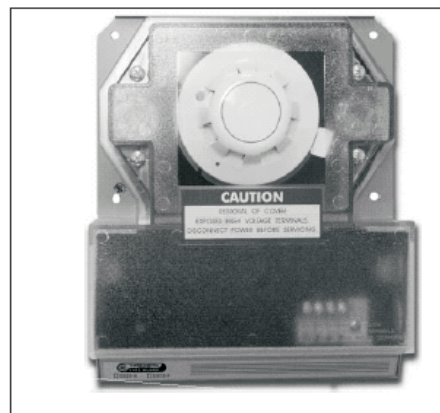
The IS819 may utilize a Harrington Signal, Inc. photoelectric (-P) or ionization (-N) detector head which is included with the unit. These devices have unique features that benefit the installer and the end user; user friendly addressing, extended data and alarm features meet the demands of today's high-technology environments.

Each Harrington Signal Inc. duct detector is supplied with an X-pert card. In order to set the proper address, consult the coding guide.

Place a screwdriver in the pips slit and give it a firm twist. Removal of the proper pip(s) completes the coding procedure. Slide the coded X-pert card into the side of the base, making sure it locks into position. Once the detector head is placed into the base, the remaining pips will operate the address-buttons on the detector head and the address will be read by the head's electronics.

Factory pre-programmed X-pert cards which have the appropriate address pips removed, and the address number silk screened on the protruding tab may be purchased if desired.

Air sampling is accomplished by two tubes which protrude into the duct. An exhaust tube of one standard length (7") is provided with the detector housing. Intake sampling tubes, which must be ordered



separately, are supplied in three standard lengths. Duct mounting is accomplished by the use of a template and 4 sheet metal screws, which are provided.

Ordering Information

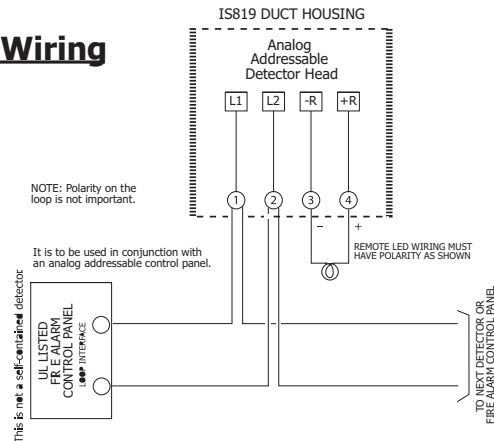
Model Number	Part Number	Description
IS819-N	IS819-N	2 wire addressable duct detector ION
IS819-P	IS819-P	2 wire addressable duct detector PHOTO
IC-ST5-1	IC-ST5-1	Sampling tube for 12" or less duct width
IC-ST5-2.5	IC-ST5-2.5	Sampling tube for 6" to 2.5' duct width
IC-ST5-5	IC-ST5-5	Sampling tube for 2.5' to 5.0' duct width
IC-ST5-10	IC-ST5-10	Sampling tube for 5.0' to 10.0' duct width
IS819/820-RA	IS819/820-RA	Remote Alarm
IS819/20-RD	IS819/20-RD	Remote Pilot
IS819/20-RH	IS819/20-RH	Remote Alarm Horn



Product Features

- UL Listed S5541
- Remote alarm LED may be added
- LED Alarm indication on sensor head
- Very low standby current
- Less labor intensive to install and maintain
- Large terminal connection screws
- Rugged steel backbox with clear plastic cover
- Interchangeable "Plug-In" Photoelectric or Ionization heads
- Installation without cover removal (mechanical)
- No additional screens or filters to clean or replace
- Advanced detector head design yields internal dust filtering
- Two wire supply, polarity insensitive
- Three standard sampling tube lengths available

Wiring



For additional information and/or support,
please contact our sales department at
1-800-577-5758 or www.harringtonfire.com

Engineers & Architects Specifications

- Duct smoke detectors shall be Harrington Signal, Inc. IS819 Series. For ionization detectors the model number is IS819-N, for photoelectric detectors the model number is IS819-P. The detectors shall be listed by Underwriters Laboratories per UL268A. The detectors shall operate at air velocities from 500 feet per minute to 4000 feet per minute.
- The duct detector housings shall be of metal construction and complete mechanical installation may be performed without removal of detector cover.
- Detector heads shall not require additional filters or screens which must be maintained. The heads shall not retain location specific address information.
- The housing shall contain a detector base which will accept photoelectric or ionization detector heads. The base shall retain all location specific address information.
- Terminal connections shall be of the screw type and be a minimum of #6 screw. (#12 to #22AWG compatible).
- All wiring must comply with local codes and regulations.



HARRINGTON
FIRE ALARM



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Product Specifications

MODEL NUMBER:	IS819-N	Ionization duct smoke detector
	IS819-P	Photoelectric duct smoke detector
DETECTOR HEAD MODEL NUMBER:	55000-550	Ionization detector for IS819-N
	55000-650	Photoelectric detector for IS819-P
SAMPLING TUBES:	IC-ST5-2.5	Sampling tube for 6" to 2.5' duct width
	IC-ST5-5.0	Sampling tube for 2.5' to 5.0' duct width
	IC-ST5-10.0	Sampling tube for 5.0' to 10.0' duct width
POWER REQUIREMENTS:	17 to 28VDC (24VDC nominal)	
STANDBY CURRENT:	IS819-N	280µA Ionization
	IS819-P	340µA Photoelectric
POWER-UP SURGE CURRENT:	IS819-N	1mA Ionization
	IS819-P	1mA Photoelectric
AIR VELOCITY:	500 to 4000 ft./min.	
AMBIENT TEMPERATURE:	32°F to 100°F (0°C TO 38°C)	
HUMIDITY:	0% to 85% RH Non-Condensing/Non-Freezing	
WIRING:	Solid or stranded; #12 to #22 AWG terminals	
APPROVALS:	UL Listed #S5541	
MATERIAL:	18GA steel backbox; clear plastic cover (Makrolon 94V-0)	
FINISH:	Gray Paint	
DIMENSIONS:	10" H x 8.25" W x 2.25" D (25.4 cm H X 21 cm W x 5.7 cm D)	
MAX. NET WT.:	4 lbs.	
RADIOACTIVE ELEMENT:	For IS819-N; Americium 241; 0.9 Micro-Curie	
	Do not expose to corrosive atmospheres.	
HARDWARE:	7" exhaust tube, sampling tube end cap, mounting template, and mounting hardware included	
ACCESSORIES:	IS819/820-RA	Remote Alarm LED
	IS819/820-RH	Remote Alarm Horn
	IS819/820-RD	Remote Alarm LED

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Harrington Signal Inc. Fire Alarm reserves the right to change specifications without notice. Quality manufactured for Harrington Signal by A.I.R. Products.