

SMOKE DETECTOR

SM-501

The SM-501 series duct smoke detectors will provide early detection of smoke and products of combustion present in the air moving through a duct in any commercial, industrial, or residential application. These devices are designed for the prevention of smoke re-circulation by the air handling systems, fans, and blowers. The SM-501 is designed and built to meet all local requirements, as well as the NFPA regulations regarding duct smoke detectors. Output terminals are provided for remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or pushbuttons. Air sampling is accomplished via two tubes that protrude into the duct. An exhaust tube with a standard length of 7" is supplied in the installation kit with the unit. Once the duct size is

determined, a sampling tube must be ordered. Four standard sizes including a 1', 2.5', 5', and 10' lengths can be ordered and cut to the correct size of the duct. The SM-501 provides (2) sets of 10A Form "C" alarm contacts, along with (1) set of 10A Form "C" trouble contacts for monitoring head removal and supply voltage failure. The green pilot and red alarm indicators provided on the front of the SM-501 signal the operating status of the device. A manual test/reset switch is located next to the LED indicators.

The ACI remote accessories are designed to be used with the ACI Duct Smoke detectors to provide audible and visual indication as well as remote test/reset functions. These devices mount to a standard single or double gang electrical backbox. Remote accessories are usually required by the AHJ (Inspector) for installation. If a duct smoke detector is not wired to a fire system or a remote test station, when the unit goes into alarm, the end user would have to climb up to the duct to manually reset the unit. ACI offers two series of remote accessories, The MS Series and the MSR-50R Series.

Applications: Smoke Detection in HVAC Ducts in Commercial, Industrial & Residential Applications

The SM-501 Series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, workaci.com.

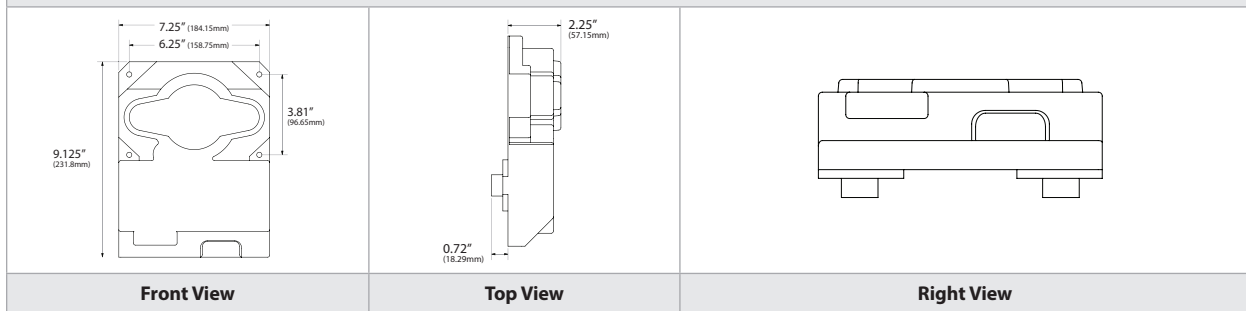
PRODUCT SPECIFICATIONS

Supply Voltage:	24 VAC/VDC, 115 VAC, 230 VAC
Maximum Operating Current (Standby):	24 VDC: 15 mA 24 VAC: 35 mA 115 VAC: 25 mA 230 VAC: 12 mA
Maximum Operating Current (Alarm):	24 VDC: 56 mA 24 VAC: 74 mA 115 VAC: 32 mA 230 VAC: 16 mA
Contact Form:	Form 1C (SPDT Contact)
Maximum Contact Switching Voltage:	115 VAC
Maximum Contact Switching Current:	10 Amps (Resistive)
Alarm Relays:	Two (2)
Trouble Relays:	One (1)
Detection Head Type:	Photoelectric
Air Velocity:	500 to 4,000 ft/minute
Wiring Connections:	Screw Terminal Blocks
Conductor Size:	Solid or Stranded: #12 to #22 AWG
Operating Temperature (SM-501-P):	32°F to 140°F (0°C to 60°C)
Maximum Operating Humidity Range:	85 ±5 % RH (@32 ±2°C; 86 ±3.6°F) Non-Condensing / Non-Freezing
Enclosure Material:	18 ga. Steel backbox, clear plastic cover (Makrolon 94V-0)
Enclosure Base Finish:	Grey
NEMA Rating:	NEMA 1
Hardware Included:	7" exhaust tube, sampling tube end cap, mounting template & mounting hardware
Enclosure Product Dimensions:	(L) 9.125" (231.8 mm) x (W) 7.25" (184.15 mm) x (H) 2.25" (57.15 mm)
Product Weight:	3.5 lbs (1.59 kg)
Agency Approvals:	UL & CUL Listed (UL268A, UROX, UROX7), File # S2829 CSFM Listed (3240-1004:108) MEA Accepted (73-92-E; VOL. 26)





DIMENSIONAL DRAWING



STANDARD ORDERING

Model #	Item #	Description
SM-501-P	102955	Smoke Detector, Square Ducts, Photoelectric

SAMPLING TUBE ORDERING

Model #	Item #	Description
FAST TUBE	131201	Package of (3) 24" Sections Sectional sampling tube, quickly assembled to length & UL
STS-2.5	102961	Sampling Tube for 6" to 2.5' duct width
STS-5.0	102962	Sampling Tube for 2.5' to 5.0' duct width
STS-10.0	102960	Sampling Tube for 5.0' to 10.0' duct width

Note: Sampling Tubes are required and should cover 80% of duct width.

ACCESSORIES ORDERING

Model #	Item #	Description
55000-328APO	131873	Replacement Photoelectric Detector Head
TG-1000	144246	Aerosol Test Gas

ACCESSORIES ORDERING

Model #	Item #	Description
MSR-50RKA/W	146753	Remote with Key, Sounder, White Double Gang Plate
MSR-50RKAV/W/C	146754	Remote with Key, Strobe, Sounder, White Double Gang Plate
MS-KA/R	111733	Remote with Key, LED for Alarm, Single Gang Plate