

## Indoor Air Quality

### SMOKE & GAS DETECTORS

#### System Sensor Innovair® Series Photoelectric Low-Flow Duct Smoke Detectors



**Features:**

- Photoelectric, integrated low-flow technology
- Air velocity rating from 100 ft./min. to 4000 ft./min. (0.5 m/sec. to 20.32 m/sec.)
- Versatile mounting options: square or rectangular configuration
- Plug-in sensor offers superb false alarm immunity
- Increased wiring space with a newly added 3/4-inch conduit knockout
- One easy-access Test/Reset button and improved LED status
- Patented interconnect feature for multi-fan shutdown
- New high-contrast terminal designations
- Built-in short-circuit protection from operator wiring
- Backward compatibility with existing Innovair products, including remote accessories
- and the latest sensor technology
- Broad ranges for operating temperature (4°F to 158°F) and humidity (0% to 95% non-condensing)
- Patented sampling tube installs from front or back of the detector with no tools required
- Field-selectable settings for configuring the detector
- Integrated Smoke Test Port (S1-DUCTSD ONLY)
- Two DPDT Form-C relay contacts
- 24 VAC/DC or 120 VAC

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-DUCTSD	STANDARD 4-WIRE PHOTOELECTRIC DUCT SMOKE DETECTOR	
S1-D4120	4-WIRE PHOTOELECTRIC LOW-FLOW DUCT SMOKE DETECTOR	
S1-D4120W	4-WIRE PHOTOELECTRIC LOW-FLOW DUCT SMOKE DETECTOR WITH WATERPROOF ENCLOSURE	

#### System Sensor Innovair® Series Photoelectric Duct Smoke Detectors

##### *Photoelectric Duct Smoke Detector Accessories*

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-AOS	MINI-ALERT ADD-ON STROBE (WHITE)	
S1-APA151	REMOTE ANNUNCIATOR WITH PIEZO ALARM	
S1-B210LP	B210LP PLUG-IN DETECTOR BASE	
S1-D4P120	4-WIRE PHOTOELECTRIC POWER BOARD COMPONENT ONLY, 24 VAC/DC, 120 VAC	
S1-D4S	4-WIRE PHOTOELECTRIC SENSOR COMPONENT ONLY	
S1-DST1	METAL SAMPLING TUBE DUCT WIDTH UP TO 1 FT. (0.3 M)	
S1-DST1.5	METAL SAMPLING TUBE DUCT WIDTHS 1 FT. TO 2 FT. (0.3 TO 0.6 M)	
S1-DST10	METAL SAMPLING TUBE DUCT WIDTHS 8 FT. TO 12 FT. (2.4 TO 3.7 M)	
S1-DST3	METAL SAMPLING TUBE DUCT WIDTHS 2 FT. TO 4 FT. (0.6 TO 1.2 M)	
S1-DST5	METAL SAMPLING TUBE DUCT WIDTHS 4 FT. TO 8 FT. (1.2 TO 2.4 M)	
S1-ETX	METAL EXHAUST TUBE DUCT WIDTH 1 FT. (0.3 M)	
S1-MHR	MINI-HORN, RED	
S1-MHW	MINI-HORN, WHITE	
S1-RA100Z	REMOTE ANNUNCIATOR ALARM LED	
S1-RTS151	REMOTE TEST STATION	
S1-RTS151KEY	REMOTE TEST STATION WITH KEY LOCK	
S1-RTS2	MULTI-SIGNALING ACCESSORY	
S1-RTS2-AOS	MULTI-SIGNALING ACCESSORY	
S1-2D51	PHOTOELECTRIC SMOKE DETECTOR HEAD	

#### SL-2000 Series Duct Smoke Detectors



**Available in both Ionization & Photoelectric Versions**

**Features:**

- Designed to maximize efficiency of installation and maintenance
- “No-Tools Required” system allows for front or rear loading and removal of sampling tubes
- “No-Tools Required” thumbscrews make cover removal a snap
- Patent pending “test port” allows for aerosol smoke testing without cover removal
- “Low-Flow Technology” SL-2000 is listed for velocities between 100–4,000 ft. per minute

SOURCE 1 PART NO.	VERSION	SPECIFICATIONS	APPLICATION	MLP \$
S1-SL-2000-N	IONIZATION	4-WIRE, UNIVERSAL VOLTAGE	HIGH TEMPERATURE	
S1-SL-2000-P	PHOTOELECTRIC	4-WIRE, UNIVERSAL VOLTAGE	LOW-FLOW TECHNOLOGY	

##### *Accessories*

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-STN-10.0	10.0' SAMPLING TUBE	
S1-STN-2.5	2.5' SAMPLING TUBE	
S1-STN-5.0	5.0' SAMPLING TUBE	
S1-TG-2000	TEST GAS WITH TEST PORT NOZZLE FOR DUCT DETECTORS	
S1-WP-2000	WEATHERPROOF ENCLOSURE	

##### *Replacement Parts*

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-55000-225	REPLACEMENT IONIZATION SMOKE DETECTOR HEAD FOR SL-2000-N	
S1-55000-328	REPLACEMENT PHOTOELECTRIC SMOKE DETECTOR HEAD FOR SL-2000-P	
S1-STN-XT	REPLACEMENT EXHAUST TUBE	

# Indoor Air Quality

## SMOKE & GAS DETECTORS

### SM-501 Series Duct Smoke Detectors



Available in both Ionization & Photoelectric Versions

Features:

- Compact design allows for installation in the tightest spots
- Trusted performance, rugged steel construction
- Specifically designed to link up to 30 detectors

SOURCE 1 PART NO.	DESCRIPTION	SPECIFICATIONS	MLP \$
S1-SM-501-N	IONIZATION	4-WIRE, UNIVERSAL VOLTAGE	

#### Accessories

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-STS-10.0	10.0' SAMPLING TUBE	
S1-STS-2.5	2.5' SAMPLING TUBE	
S1-STS-5.0	5.0' SAMPLING TUBE	
S1-TG-1000	STD. TEST GAS SPRAY NOZZLE FOR SM-501 SERIES & OPEN AREA DETECTORS	
S1-WP-1	WEATHERPROOF ENCLOSURE	

#### Replacement Parts

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-STS-XT	REPLACEMENT EXHAUST TUBE	

### Horns/Strobes



SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-SHP24-15750	WHITE HORN/STROBE WITH OPAQUE LENS	

### MS Series Remote Accessories



Features:

- Made of attractive and durable stainless steel
- Provides visual and/or audible status notification
- Remote test/reset option available
- 15 versions available to meet your needs

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-MS-KA/P/R	REMOTE ALARM LED (RED), PILOT (GREEN) & KEY-OPERATED TEST/RESET SWITCH	
S1-MS-KA/P/R/T	REMOTE TROUBLE LED (YELLOW), PILOT LED (GREEN) & KEY-OPERATED TEST/RESET SWITCH	
S1-MS-KA/R	REMOTE ALARM LED (RED) & KEY-OPERATED TEST/RESET SWITCH	
S1-MS-RA	REMOTE ALARM LED (RED)	
S1-MS-RA/FT/P	REMOTE TROUBLE LED (YELLOW), PILOT LED (GREEN) & PUSH-BUTTON TEST/RESET SWITCH	
S1-MS-RA/P	REMOTE ALARM LED (RED) & PILOT LED (GREEN)	
S1-MS-RA/P/R	REMOTE ALARM LED (RED), PILOT LED (GREEN) & PUSH BUTTON TEST/RESET SWITCH	
S1-MS-RA/P/T	REMOTE TROUBLE LED (YELLOW), PILOT LED (GREEN)	
S1-MS-RA/R	REMOTE ALARM LED (RED) & PUSH-BUTTON TEST/RESET SWITCH	
S1-MS-RD	REMOTE DUCT SMOKE DETECTOR LED (RED)	
S1-MS-RD	REMOTE TROUBLE LED (YELLOW) & PILOT LED (GREEN)	
S1-MS-RH	REMOTE ALARM HORN	
S1-MS-RH/KA/P/A/T	REMOTE ALARM HORN, ALARM LED (RED), TROUBLE LED (YELLOW), PILOT LED (GREEN) & KEY-OPERATED TEST/RESET SWITCH	Á
S1-MS-RH/KA/P/R	REMOTE ALARM HORN, ALARM LED (RED), PILOT LED (GREEN) & KEY-OPERATED TEST/RESET SWITCH	Á
S1-MS-RH/P/A	REMOTE ALARM HORN, ALARM LED (RED) & PILOT LED (GREEN)	Á

## Indoor Air Quality

### SMOKE & GAS DETECTORS

#### T-PB Series 24VAC Power Supplies



**Features:**

- 24VAC output switch with status LED
- 4.0A, 96VA (Class I) and 3.0A, 72VA (Class II) versions available
- 115VAC @ 5.0A convenience outlet located on the front panel

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-T-PB-202-0	POWER SUPPLY, 100VA, 24VAC @4.0A, CLASS 1 CHASSIS	
S1-T-PB-202-1	POWER SUPPLY, 100VA, 24VAC @ 4.0A, CLASS 1 CHASSIS WITH ENCLOSURE	

#### Audible/Visible Notification

##### *System Sensor SpectrAlert Advance Series: HR-LF / HW-LF*



The SpectrAlert Advance HR-LF is a two-wire, 12/24 volt, low frequency sounder for wall or ceiling installation.

**Specifications:**

- Voltage: Regulated 12DC/FWR or regulated 24DC/FWR
- Operating Voltage Range: 8 to 17.5 V (12V nominal) or 16 to 33 V (24 nominal)
- Wiring Gauge: 12 to 18 AWG
- Operating Temperature: -40°F to 151°F (-40°C to 66°C)
- Humidity Range: 10 to 93% non-condensing
- Dimensions: 5.6"L x 4.7"W x 1.3"D (142mm L x 119mm W x 33mm D)

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-HR-LF	SOUNDER,LOW FRQ,RED	
S1-HW-LF	SOUNDER,LOW FRQ,WHITE	

##### *System Sensor SpectrAlert Advance Series: P2RH-LF / P2WH-LF*



The SpectrAlert Advance P2RH-LF is a two-wire, 24 volt, low frequency sounder strobe with selectable high-candela strobe settings of 135, 150, 177 and 185 cd for wall or ceiling installation.

**Specifications:**

- Voltage: Regulated 24DC/FWR
- Candela: Selectable high-candela strobe settings of 135, 150, 177 and 185 cd
- Operating Voltage Range: 16 to 33 V (24 nominal)
- DC Max. Operating Current: 16 to 33 V (24 nominal)
- Wiring Gauge: 12 to 18 AWG
- Operating Temperature: -40°F to 151°F (-40°C to 66°C)
- Humidity Range: 10 to 93% non-condensing
- Wall mount dimensions (including lens): 6.4"L x 4.7"W x 2.5"D (162mm L x 119mm W x 64mm D)

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-P2RH-LF	SOUNDER STROBE,WALL,LOW FRQ, HIGH CD, RED	
S1-P2WH-LF	SOUNDER STROBE, WALL,LOW FRQ, HIGH CD, WHITE	

## Indoor Air Quality

### SMOKE & GAS DETECTORS

#### BRK Electronics Carbon Monoxide and Smoke Alarms

##### 120V AC/DC Carbon Monoxide Alarm



**Features:**

- Electrochemical CO sensor
- Single button test/silence
- 9V alkaline battery backup
- Latching alarm indicator remembers which unit initiated an alarm
- Can silence the low-battery chirp for up to 8 hours or temporarily silence an unwanted nuisance alarm.
- Intelligent Sensing Technology(TM) helps reduce the number of nuisance alarms
- Easy installation and maintenance
- End-of-life signal
- 5-year limited warranty

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-CO5120BN	120V AC/DC CARBON MONOXIDE ALARM	

##### 120V AC/DC Smoke/CO Combo Alarm



**Features:**

- Electrochemical CO sensor
- Single button test/silence
- 9V alkaline battery backup
- Latching alarm indicator remembers which unit initiated an alarm
- Can silence the low-battery chirp for up to 8 hours or temporarily silence an unwanted nuisance alarm.
- Intelligent Sensing Technology(TM) helps reduce the number of nuisance alarms
- End-of-life signal
- 5-year limited warranty

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-SC9120B	120V AC/DC SMOKE/CO COMBO ALARM	

##### 9V Alkaline Battery Powered Smoke/CO Combo Alarm



**Features:**

- Electrochemical CO sensor
- Single button test/silence
- 9V alkaline battery powered
- Latching alarm indicator indicates which unit initiated an alarm or has low battery power
- Can temporarily silence the low-battery chirp or an unwanted nuisance alarm.
- Intelligent Sensing Technology(TM) helps reduce the number of nuisance alarms
- Easy installation and maintenance
- End-of-life signal
- 5-year limited warranty

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-SCO2B	9V ALKALINE BATTERY POWERED SMOKE/CO COMBO ALARM	

##### 9V Battery Electrochemical Carbon Monoxide Alarm with Silence



**Features:**

- Electrochemical CO sensor
- Silence feature
- End-of-life signal
- Tamper resistant locking pin
- 9V battery included
- 5-year limited warranty

SOURCE 1 PART NO.	DESCRIPTION	MLP \$
S1-CO250B	9V BATTERY ELECTROCHEMICAL CARBON MONOXIDE ALARM WITH SILENCE	

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### SMOKE & GAS DETECTORS

#### Honeywell C7232 Carbon Dioxide (CO<sub>2</sub>) Sensor



The Carbon Dioxide (CO<sub>2</sub>) Sensors and Controllers are stand-alone carbon dioxide (CO<sub>2</sub>) sensors for use in determining ventilation necessity with HVAC controllers. The sensor measures the CO<sub>2</sub> concentration in the ventilated space. (These models are wall-mount only.) The sensors are used in ventilation and air conditioning systems to control the amount of fresh outdoor air supplied to maintain acceptable levels of CO<sub>2</sub> in the space.

**Features:**

- Models available with LCD that provides sensor readings and status information.
- Non-Dispersion-Infrared (NDIR) technology used to measure carbon dioxide gas.
- Gold-plated sensor provides long-term calibration stability.
- C7232 provides voltage or current output based on CO<sub>2</sub> levels.
- Models available with SPST relay output.
- Proportional plus Integral (P+I) control algorithm.
- Used for CO<sub>2</sub> based ventilation control (Demand Control Ventilation (DCV)).
- Automatic Background Calibration (ABC) algorithm based on long-term evaluation reduces required typical zero-drift check maintenance.
- Digital input with programmable delay time for occupancy function using a sensor, pushbutton, or switch.

**Specifications:**

**Mounting:** Wall

**Display:** Yes

**Carbon Dioxide Range:** 0 to 3000 ppm

**Analog Output:** 0/2 to 10 Vdc or 0/4 to 20mA w/ one relay output

**Relay Output:** One: Normally Open SPST

**Accessories:** 32002181-001: Zero Calibration Service

**Accuracy:** 5% full scale

**Timing (response):** 2 minutes

SOURCE 1 PART NO.	POWER SUPPLY (VOLT)	FREQUENCY (HZ)	CONTACT RATING	OPERATING TEMPERATURE RANGE	DIMENSIONS	MLP \$
S1-C7232A1008	24 VAC (+/- 20%)	50, 60	1 A @ 50 VAC/24 VDC	32°F TO 122°F (0°C TO 50°C)	5-1/16"H X 3-11/16"W X 2"D (128 MM H X 80 MM W X 25 MM D)	Á
S1-C7232A1016	24 VAC (+/- 20%)	50, 60	1 A @ 50 VAC/24 VDC	32°F TO 122°F (0°C TO 50°C)	5-1/16"H X 3-5/32"W X 2"D (128 MM H X 80 MM W X 25 MM D)	Á
S1-C7232B1014	24 VAC (+/- 20%)	50, 60	1 A @ 50 VAC/24 VDC	32°F TO 122°F (0°C TO 50°C)	5-5/8" H X 3-5/16" W X 3 7/16" D X plus 8" long sensing tube (142 MM H X 84 MM W X 87 MM D X plus 203 MM sensing tube)	

## Zoning, Venting & Economizer Controls

### CONTROL PANELS

#### Source 1 Four-Zone Expandable Control Panels



**Zone System, Model S1-MZS4**

Controls various types of HVAC Equipment all from the same panel. The S1-MZS4 features single stage thermostats to control up to three stage heating and two stages cooling and simple heat pump thermostats to control heat pumps. The S1-MZS4 has various features that make installation and checkout very simple for all of the board's functionality. The S1- MZS4 panel is made of sturdy ABS plastic and can be mounted to any flat surface. Wall or return plenum and NOT on the furnace or plenum. The panel can be located in an attic space or in an enclosed cabinet of a rooftop unit. Features Continuous Air Circulation( CAC) in those zones where the thermostat's Fan Switch is set to ON. The S1-MZS4 is factory set for conventional fossil fuel (oil or gas) single and up to three stage heating and two stage cooling. The panel only needs to be configured when using with an conventional electric furnace or hydro-air system in order to bring the fan on with a call for heat, or when using with a heat pump equipment and thermostats.

**Features:**

- Color coded push-in wiring blocks
- LED indicator lights for system operation, Individual zone indicating lights
- Single stage, two stage, and heat pump compatible
- Expandable to any number of Zones, Uses any four-wire thermostat
- Leaving air sensor for capacity protection
- Staging by time or by number of zones calling, Intelligent changeover timing

SOURCE 1 PART NO.	DESCRIPTION	ZONES	STAGES	VOLTAGE	MLP \$
S1-MZS4	ZONING CONTROL PANEL	4	2H/2C	24	
S1-MZSK	ZONING CONTROL PANEL KIT	4	2H/2C	24	