# S1209 Series
## Photoelectric Smoke Alarm

120 VAC with 9V Battery Back-Up Single/Multiple Station Smoke Alarm

**24 Units Per Carton, 24 pounds per carton**

## Applications

The S1209 Series photoelectric smoke alarms are for use as an evacuation device in all dwelling units, including but not limited to homes, apartments, hospitals, hotels and motels.  Available in two models, the S1209 Series is engineered to virtually eliminate nuisance alarms and deliver outstanding performance wherever reliable smoke detection is required.

The S1209 Series is provided with a 9V alkaline battery for back-up in the event building power is lost.  The battery drawer provides easy replacement without removing the unit from the wall or ceiling.

The Gentex S1209 Series is provided with a push button self test and functionality test feature. The push button self test verifies power operation and tests battery levels. The push and hold button functionality test analyzes the photoelectric sensing chamber for proper operation of smoke alarm. The self and functionality tests are in compliance with NFPA 72 and ANSI/UL Standards.

Features of the smoke alarm series include DUALINK® tandem capabilities with Gentex tandem interconnect capable alarms products. Options include Form A/Form C dry contacts for remote annunciation.

The S1209 smoke alarms are ANSI/UL 217 and are warranted for one year from date of purchase.

## Standard Features

* 120 VAC with 9V battery back-up
* Photoelectric smoke sensing technology
* Horn frequency 3100 Hz (nominal)
* Temporal 3 evacuation piezo horn
* Nominal 2.5% sensitivity
* Push button self test feature, verifies power sources/operation
* Push and hold button functional test feature, analyzes sensing chamber
* Optional Auxiliary Form A/Form C relay contacts (F model)
* Relay contacts operate when on battery back-up
* Quick-disconnect wiring harness
* DUALINK® - tandem with all Gentex tandem capable alarms
* Non-latching (self restoring) alarm
* LED for AC power on
* Red LED pulses every 30 seconds, green
* Solid state red LED to indicate smoke presence
* Mounting hardware adapts to standard junction boxes
* Dust cover to prevent particle contamination during installation
* Low or missing battery indicator
* One year warranty from date of purchase

## Product Listings

* ANSI/UL 217 Listed
* CSFM: 7257-0569:0501

## Product Compliance

* NFPA 72
* IBC/IFC/IRC
* Quality Management System is certified to: ISO 9001:2008

**GENTEX CORPORATION**

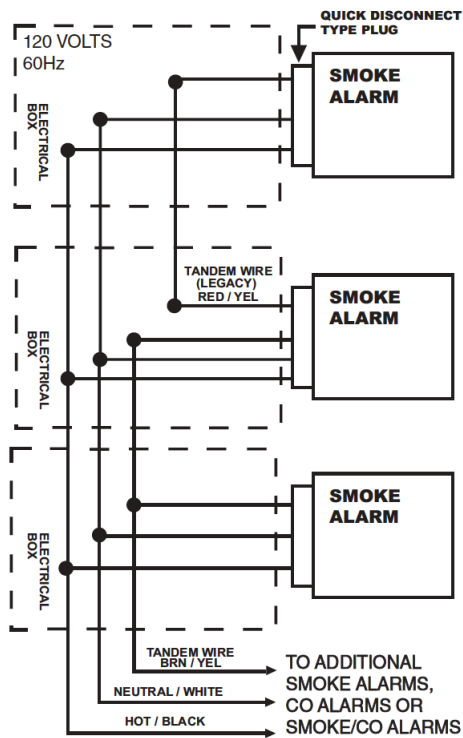| Model | Part Number | Voltage (VAC) | Form A/C Contacts |
|-------|-------------|---------------|-------------------|
| S1209 | 917-0059-002 | 120 VAC | |
| S1209F | 917-0057-002 | 120 VAC | • |

## Notes

- Series available in round configuration only
- Utilizing DUALINK®, if S1209 alarm annunciates, all smoke alarms, CO alarms or combination smoke/CO alarms tandem interconnected will sound smoke alarm warning.
- Utilizing DUALINK®, if S1209 is tandem interconnected with CO alarms or combination smoke/CO alarms and CO devices go into alarm, CO alarms and smoke alarm will sound CO warning.
- When both smoke and CO conditions are present, smoke condition will have priority and alarm will sound smoke annunciation.
- Units produce a temporal 3 audible alarm

## Electrical Specifications

Operating Voltage ............................................................. 120VAC, 60Hz

Operating Current ...........................................................0.045 amps

Operating Current (Relay Options)..............................0.070 amps

Operating Ambient Temp Range.................................40°F to 100°F

Alarm Horn Rating.............................................................meets or exceeds 85dBA at 10'

Nominal Sensitivity .........................................................2.5% obscuration

"F" Auxiliary Relay.............................................................1 Form A and 1 Form C (0.6 amp)

Size .......................................................................................Diameter: 6.25" OA (5.75" at base) Depth: 1.80"

Secondary Power Source ...............................................Alkaline 9V battery Duracell® MN 1604

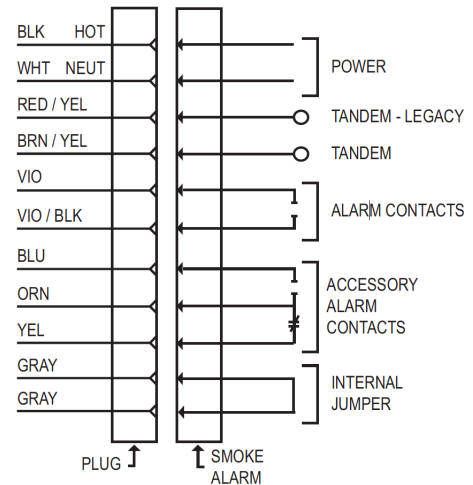## Tandem Wiring Diagram



### Limitations

- Maximum of 12 S1209/S1209F alarms may be connected together
- Do not exceed 125 ft. between each alarm
- Do not exceed 1125 ft. between the first and last alarm
- Note: Gentex smoke alarms can not be interconnected to alarms from other manufacturers

## Relay Model

**Models:** S1209F



### Caution

- RED/YELLOW and BROWN/YELLOW wire to be capped when not in use
- This wire is for tandem connection only
- Do not connect to any other circuit

# S1209 Series
## Photoelectric Smoke Alarm

## Architect & Engineering Specifications

The photoelectric smoke alarm shall be a Gentex Model S1209/S1209F or approved equal which shall provide at least the following features and functions:

- Nominal smoke sensitivity shall be 2.5%.
- The smoke alarm shall utilize an infrared LED sensing circuit which pulses in 4 to 5 second intervals when subjected to smoke. After 2 consecutive pulses in smoke, the alarm will activate.
- The S1209 Series alarm shall have a Duracell® MN 1604 9V alkaline battery as a back-up in the event building power is lost.
- The 9V battery impedance shall be verified by the circuit of the smoke alarm.
- The alarm shall provide an indicator when the battery is low in power, high impedance or is missing.
- The sensing chamber shall be fully protected to prevent entrance of small insects, thus reducing the probability of false alarms.
- A solid state piezo alarm meets or exceeds the rating of 85dBA at 10ft.
- A visual LED monitor (condition indicator) will slow pulse in normal operation and rapid pulse in alarm (red color)
- An easily accessible test button shall be provided. Push down on button for 5 seconds causing smoke alarm to activate. If device does not go into alarm, the device is not working properly.
- The device shall have tandem interconnect capability of up to 12 smoke alarms.
- The alarm shall have the capability to tandem interconnect with all Gentex tandem capable smoke alarms, CO alarms or combination smoke/CO alarms,including 9123 Series, 7139CS Series, CO1209 Series and GN-503 Series
- The smoke alarm shall be non-latching (self-restoring).
- The manufacturer shall provide models with the optional feature of auxiliary Form A/Form C relay contacts for initiating remote functions and annunciation.
- Unit must be ANSI/UL 217 listed for both wall and ceiling mount
- Unit shall be listed by Underwriters Laboratories

All equipment shall be completely factory assembled, wired and tested, and the contractor shall be prepared to submit a certified letter testifying to this condition.  Smoke alarms which do not meet all of the requirements of this specification will not be considered.  For complete product specifications, refer to product installation manual.