SMOKE ALARM & LED STROBE

PHOTOELECTRIC

MODEL 7020BSL

CAT 1038335

BRK®

THE PROFESSIONAL STANDARD

120V AC, 60Hz Wire-in with 10 Year Sealed Lithium Battery Backup
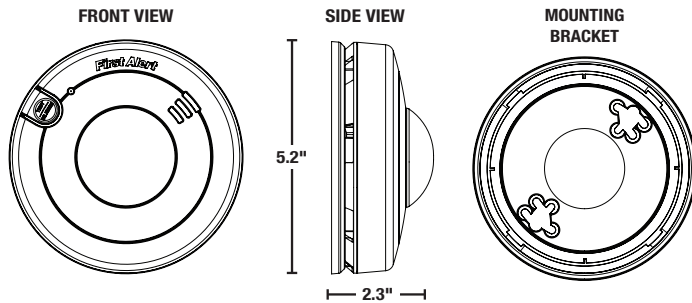
Description:

The BRK Brands, Inc. Model Number 7020BSL (CAT 1038335) is a wire-in, 120V AC 60Hz single and/or multiple station photoelectric smoke alarm with integrated 177 candela LED strobe light specifically designed for residential and institutional applications including sleeping rooms of hospitals, hotels, motels, public housing, dormitories and other multifamily dwellings as defined in standard NFPA 101. Model 7020BSL complies with UL217, UL1971, CSFM, NFPA 72, HUD, FHA and other agencies that model their codes after the above agencies. They meet building codes where AC with battery backup, silence, photoelectric smoke alarms are required. The alarms are inter-connectable with up to 18 devices, of which 12 can be smoke alarms. The BRK 7020BSL alarms feature a photoelectric smoke sensing chamber, an integrated 177 LED candela strobe light, an 85dB horn and sealed 3V lithium battery capable of providing backup power for alarm over 10 year alarm life. The Strobe Light is designed to provide deaf & hard of hearing individuals with a visual warning of a fire. The Smart Strobe has separate flash patterns for smoke/ heat and carbon monoxide dangers (when connected to a First Alert CO alarm). This helps a hearing impaired person better distinguish the danger present. The 177 candela LED strobe meets UL 1971 requirements and flashes at a rate of an average of 60 times a minute. The LED flash is also synchronized so when multiple units installed, strobes flash in unison.

This alarm features two latching features and two silence features. Alarm Latch: Easily identifies initiating alarm even after alarm condition has subsided. Low Battery Latch: Identifies which unit is in low battery condition by blinking the green power light. Low Battery Silence: Temporarily silence the low battery chirp for up to eight hours. Alarm Silence: Silence alarm for several minutes. Optipath 360 technology provides 360 degrees of direct access to the smoke sensing chamber. Other Contractor preferred features include a dust cover, easy twist-lock mounting bracket and a "Quick-Connect" wiring harness.

AC POWERED WITH 10 YEAR SEALED BATTERY BACKUP

INTEGRATED SMOKE ALARM & STROBE LIGHT

Requires only one junction box. Saves installation time and costs. One device includes both a strobe light and photoelectric smoke alarm.

SMART STROBE

Separate flash patterns to distinguish between smoke and carbon monoxide.

177 CANDELA SYNCHRONIZED LED STROBE

Powerful 177 candela LED strobe light provides effective visual warning to hearing impaired residents. When multiple units installed, strobe flashes in unison.

1Hz FLASH RATE

60 flashes per minute rate meets ADA, ANSI 117.1, NFPA 72 and UL1971 requirements for visual signal devices.

10 YEAR SEALED BATTERY

Lithium Metal long life battery to supply power to the alarm in the event of power failure for the 10 year life of the alarm. Sealed in the alarm housing to prevent tampering or removal.

OPTIPATH 360 TECHNOLOGY™

Provides 360 degrees of direct access to the smoke sensing chamber.

LIMITED 10 YEAR WARRANTY

P PHOTOELECTRIC

Listed to UL 217 & UL 1971 Standards

MODEL **7020BSL** cat 1038335

FRONT VIEW	SIDE VIEW	MOUNTING BRACKET

5.2"

2.3"

## ARCHITECTURAL AND ENGINEERING SPEC

The integrated strobe light & smoke alarm shall be a BRK Model 7020BSL and shall provide at a minimum the following features and functions:
1. A photoelectric smoke sensing chamber.
2. A 177 candela LED strobe light. The Smart Strobe shall have separate flash patterns to distinguish between smoke/heat and carbon monoxide dangers. When multiple units installed, strobe flash patterns will synchronize.
3. Fully screened sensing chamber to resist entry of small insects thereby reducing the probability of unwanted alarms.
4. Powered by 120V AC, 60Hz and have a sealed 10 year lithium battery backup for alarm and a solid state piezo horn rated at 85dB at 10 ft and be capable of self-restoring.
5. A visual green LED power-on indicator to confirm unit is receiving power or is in alarm.
6. A full function test button should check all alarm functions by simulating a smoke condition, causing the unit to alarm.
7. Two Latching features: Alarm Latch to easily identify initiating alarm after alarm condition has subsided. Low battery latch: to visually identify which unit is in low battery condition. Two Silence Features: Alarm Silence to temporarily silence nuisance alarms. Low Battery Silence to silence low battery chirp for up to 8 hours.
8. The unit shall be capable of operating between 40°F (4°C) and 100°F (38°C) and relative humidity between 10% and 90%.
9. The unit shall have a plug in connector and be capable of interconnection of up to 18 alarms, 12 of which can be smoke alarms.
10. The unit shall at a minimum meet the requirements of UL217, UL1971, ADA, ANSI 117.1, CSFM, NFPA 72, NFPA 101 and the ICC.

INSTALLATION OF ALARM

Installation of this smoke alarm must conform to all local electrical codes and Article 760 of the National Electrical Code (NFPA 70) and NFPA 72. Interconnected units must meet the following requirements: Total length of wire interconnecting units should be less than 1000 feet, be #18 gauge or larger and be rated at least 300V. It is recommended that all units be on the same fuse or circuit breaker. If local codes do not permit, be sure the neutral wire is common to both phases.

THE PARTS OF THIS ALARM
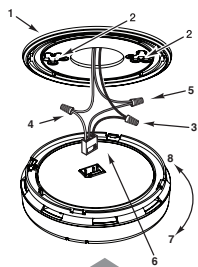
1. Mounting Bracket
2. Mounting Slots
3. Hot (Black) AC Wire
4. Neutral (White) AC Wire
5. Interconnect (Orange) Wire
6. Quick-Connect Power Connector
7. Turn this way to remove from bracket (Counterclockwise)
8. Turn this way to attach to bracket (Clockwise)
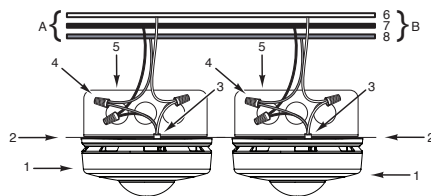
A. 120VAC 60 Hz source

B. To additional units; Maximum = 18 total (Maximum 12 Smoke Alarms)

1. Alarm	5. Junction Box
2. Ceiling or Wall	6. Neutral Wire (Wht)
3. Power Connector	7. Interconnect Wire (Orange)
4. Wire Nut	8. Hot Wire (Blk)

UL 1971 Signaling Devices Light Dispersion Chart

Angle (In Degrees)	Percent Light Intensity
0	100
5-25	90
30-45	75
50	55
55	45
60	40
65	35
70	35
75	30
80	30
85	25
90	25
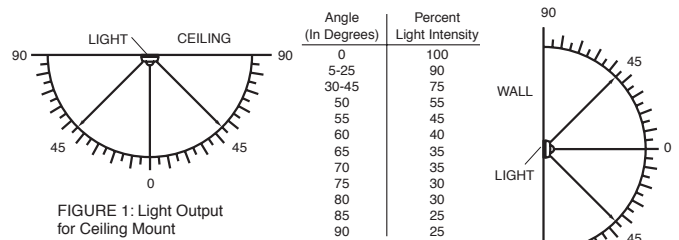
FIGURE 1: Light Output for Ceiling Mount

FIGURE 2: Light Output for Wall Mount
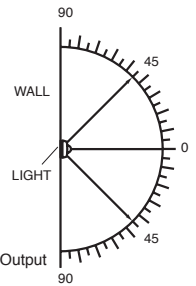
TECHNICAL SPECS

Alarm Dimensions:	5.2"dia. x 2.3"H
Weight:	10.6 oz
Operating Voltage:	120V AC 60Hz with 3V Sealed Lithium Metal Battery Backup for alarm.
Operating Current:	Alarm 0.8 A
Temperature Range:	40°F (4°C) to 100°F (38°C)
Humidity Range:	10% to 95% relative humidity (RH)
Audio Alarm:	85dB at 10 feet
Test/Silence:	Electronically simulates smoke condition, causing the unit to alarm. Press and hold test/silence button.
Alarm Reset:	Automatic when smoke clears
Interconnections:	Up to 18 units of First Alert or BRK Smoke, CO and Heat Alarms. Maximum number of 12 smoke alarms.
Smoke Sensor:	Photoelectric
Strobe Light:	177 candela LED strobe
Indicator Lights/Sounds:	
AC Power:	Constant Green LED
DC Power:	Green LED flash, once per minute
Local Alarm:	Audio alarm, steady flashing strobe and flashing Red LED
Remote Alarm (Smoke):	Audio alarm, steady flashing strobe and flashing Red LED
Remote Alarm (CO):	If this alarm interconnected to a BRK CO or Combo Alarm, then CO audio alarm, intermittent flashing strobe and Red LED OFF
Silence:	10 minutes Local and Remote alarm, 8 hours End of Life
Low Battery Latch:	Green LED flashing 2 seconds on, 2 seconds off
End of Life:	5 short chirps with 5 Green LED flashes once per minute
Listing:	Conforms to UL STD 217 & UL STD 1971

SHIPPING SPECS

Individual Carton Dimensions	5.25"L x 3.0"W x 5.25"H
Weight	0.86 lbs.
Cube	0.05 ft^3
UPC	0 29054 01801 4
Master Carton Dimensions	5.75"L x 19.13"W x 6.0"H
Master Pack	6
Weight	5.55 lbs.
Cube:	0.38 ft^3
I2of5:	600 29054 01801 6
Pallet Information	
Cases per Layer	18
Number of Layers:	7
Cases per Pallet:	126
Units per Pallet:	756
Cube:	59.26 ft^3
Weight:	784 lbs.

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