Combination Smoke and Carbon Monoxide Alarm
SC03

Technical Specifications

Sensor Type	Photoelectric smoke sensor and electrochemical CO sensor
Operating Voltage	3.0 V DC
Battery Type	3.0 V lithium battery
Standby Current	BAT1< 6 uA; BAT2< 6 uA (The average static current is less than 6 uA during a 10-minute test.)
Alarm Current	BAT1< 5 mA; BAT2 < 60 mA
Alarm Priority	The smoke alarm takes precedence when both smoke and carbon monoxide are present.
Audibility Level	> 85 dB @ 3 m
Operating Ambient Temperature	40 to 100 °F (4.4 to 37.8 °C)
Operating Relative Humidity	≤ 85% (non-condensing)
Safety Standards	EN 14604 & EN 50291
Product Life	10 years

CE RoHS
EN50291-1:2010
EN50291-1:A1:2012

Working Modes

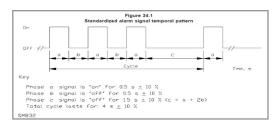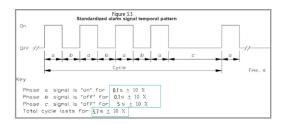|	
Powering On	After the unit is fully mounted into the mounting bracket, it will automatically turn on. The LED indicator will blink 8 cycles (red/green/yellow) in sequence. Afterwards, the LED indicator will turn off, and the unit will enter the standby mode.
Standby Mode	The LED indicator will flash green once every 60 seconds.
End of Life	Once the maximum lifetime (10 years) is reached, the alarm will deliver 2 beeps and the LED indicator will flash yellow twice every 30 seconds. This end-of-life signal can be temporarily silenced for 3 days by pressing the test button. The end-of-life silence feature can only be used for a total of 30 days. After 30 days, the end-of-life signal cannot be silenced.
Fault Indication	The alarm will deliver 2 beeps approximately every 40 seconds and the LED indicator will flash yellow 1-4 times. (The LED flashes yellow 1 or 2 times, meaning the alarm has entered smoke malfunction mode; the LED flashes yellow 3 or 4 times, meaning the alarm has entered CO malfunction mode. And the alarm must be replaced immediately.)
Exiting an Alarm	When the smoke or CO concentration drops below the alarm threshold, the alarm signal stops, the LED indicator will continuously flash green once per second for 5 seconds and then enter the standby mode.
Silence Duration	·Smoke: approx. 9 minutes ·CO: approx. 9 minutes
Low Battery Warning	·Low Voltage Range: 2.65-2.75 V DC ·The LED indicator will flash yellow together with 1 beep every 60 seconds.
Silence Function	·During the smoke or CO silence mode, the LED indicator will flash red once every 5 seconds. ·Silence function of CO alarm If you press the Test/Silence button during a CO alarm, the alarm will be terminated. If the CO density still exceeds the alarm threshold, the unit will deliver an alarm within 6 minutes. ·Silence function of smoke alarm If you press the Test/Silence button during a smoke alarm, the alarm will be terminated. If the smoke density still exceeds the alarm threshold, the unit will deliver an alarm within 9 minutes.
Test Button	·When testing the alarm weekly, press the test button until you hear a short beep, indicating that the alarm has entered the test mode. ·Once the alarm is in the test mode, the alarm will deliver 2 sets of 3 long beeps followed by 2 sets of 4 quick beeps, to indicate the alarm is operating normally. The LED indicator will flash red with the alarm sound. ·To silence the unit during an alarm. ·To test the unit's electronics and check the alarm function.
Alarm Mode	Smoke alarm: 3 long beeps every 1.5 seconds. The LED indicator will flash red with the alarm sound.

Smoke alarm: 3 long beeps every 1.5 seconds. The LED indicator will flash red with the alarm sound.

CO alarm: 4 quick beeps every 5.8 seconds. The LED indicator will flash red with the alarm sound.

Figure 34.1
Standardized alarm signal temporal pattern

Key
Phase a signal is "on" for 0.5 s ± 10 %
Phase b signal is "off" for 0.5 s ± 10 %
Phase c signal is "off" for 1.5 s ± 10 % (c = a + 2b)
Total cycle lasts for: 4 s ± 10 %
SMB32

Figure 3.3
Standardized alarm signal temporal pattern

Key
Phase a signal is "on" for 0.1s ± 10 %
Phase b signal is "off" for 0.1s ± 10 %
Phase c signal is "off" for 5 s ± 10 %
Total cycle lasts for: 5.7 s ± 10 %

Smoke & CO Sensitivity

	Test Direction	Air Flow	Sensitivity
Smoke Sensitivity	LFP (Least Favorable Position)	0.2 m/s	0.10-0.17 dB/m Air flow

	CO Concentration	CO Concentration	Alarm Response Time
CO Concentration Sensitivity	50+3/-2 PPM	50 ± 20%	60-90 minutes
	100+3/-2 PPM	100 ± 20%	10-40 minutes
	300+3/-2 PPM	300 ± 20%	< 3 minutes