

## Description

206 AC plug-in natural gas alarms are state-of-the-art inflammable gas detectors, with spoken voice warning messages. Advanced electronics in conjunction with a semiconductor gas sensor provides early detection of natural gas, with high immunity against unwanted alarms.

Models are available with wireless interconnection to create a local network of devices. Additional models are available Wi-Fi connection to an internet access point as part of a smart-home solution. Some models include both wireless interconnection and Wi-Fi connection.

The 206 AC plug-in natural gas alarm range provides home owners and installers with an easy-to-install, intelligent solution for life safety and property protection applications.

## Features

- Detects natural gas (CH<sub>4</sub>)
- Stable gas sensing chamber. No adjustment or replacement required
- Displays gas concentration levels as LEL percentage
- Detects excessive temperature
- High immunity against unwanted alarms
- Voice messages alerts building occupants
- Loud 85 dB internal voice alarm sounder
- Dedicated test control
- Separate indicators for Alarm, Fault and Power
- Wireless interconnection available on some models to create a local network of devices
- Wi-Fi connection to wireless access point and smart home application available on some models
- Wireless and Wi-Fi available on some models
- AC plug-in mains power
- Low power consumption
- Attractive housing design
- Easy installation. No programming required
- Low maintenance

## Compliance

206 AC plug-in natural gas alarms have the following compliance <sup>a</sup>.

	206-005	206-006	206-007	206-008
EN 50194 <sup>b</sup>	✓	✓	✓	✓
UL 1484 <sup>c</sup>	✓	✓	✓	✓
CE (RED) <sup>d</sup>	—	✓	✓	✓
Wi-Fi Alliance	—	—	✓	✓
CE <sup>e</sup>	✓	✓	✓	✓

<sup>a</sup> Third-party conformance assessment has not been undertaken.

<sup>b</sup> EN 50194 *Electrical apparatus for the detection of combustible gases in domestic premises. Test methods and performance requirements*

<sup>c</sup> UL 1484 *Residential gas detectors*

<sup>d</sup> EU directive 2014/53/EU *Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC Text with EEA relevance.*

<sup>e</sup> Conformité Européenne



206 natural gas AC plug-in gas alarm

## Accessories

The following accessories are compatible with 206 AC plug-in natural gas alarms.

Description <sup>a</sup>	Region	Part Number
Mains plug interface, Type A	Canada, USA	262-001
Mains plug interface, Type C	Europe, Middle East	262-002
Mains plug interface, Type G	UK, Singapore	262-003
Mains plug interface, Type I	A/NZ, China	262-004

<sup>a</sup> Refer IEC world plugs [https://www.iec.ch/worldplugs/list\\_btype.htm](https://www.iec.ch/worldplugs/list_btype.htm)

## Applications

For Wi-Fi models, smart phone applications are available by scanning the following QR Code or searching for *Smart Life – Smart Living* in the Apple App Store for iPhones, or Google Play for Android phones.



iOS / Android App *Smart Life – Smart Living*

## Specifications

Power	206-005	206-006	206-007	206-008
Power source	AC (100 ~ 240) V / 50/60 Hz			
Start-up time	≤ 10 min			
Voice message	Welcome to this Numens product.			
<b>Quiescent Condition</b>				
Quiescent power consumption	< 1.2 W			
Quiescent condition indicator	Green LED			
Digital display	Gas % LEL			
<b>Gas Alarm Condition</b>				
Gas detected	Natural gas CH <sub>4</sub>			
Sampling time	1 s			
Alarm response threshold	(0.05 ± 0.02) LEL CH <sub>4</sub>			
Voice message (primary device)	<i>Danger! A significant gas leakage is detected. To prevent an explosion, do not turn on an electrical equipment, including lights. Evacuate the area immediately and call the fire service. (repeating)</i>			
Alarm condition indicator	Red LED on	Primary device: Red LED on Replica device: Red LED flashes every 1 s	Red LED on	Primary device: Red LED on Replica device: Red LED flashes every 1 s
Digital display	Gas concentration level (% LEL)	Primary device: Gas concentration level (% LEL) Replica device: "A - A"	Gas concentration level (% LEL)	Primary device: Gas concentration level (% LEL) Replica device: "A - A"
Replica device alarm signal (where fitted)	—	3 beeps (0.5 s on, 0.5 s off), 1 s silence (repeating)	—	3 beeps (0.5 s on, 0.5 s off), 1 s silence (repeating)
Audio output level	≥ 85 dB @ 3 m			
<b>Gas Alarm Hush</b>				
Alarm condition indicator	Red LED			
Digital display	Gas concentration level flashes every 1 s			
Hush time	9 min			
Auto reset time	< 30 s			
<b>Temperature Alarm Condition</b>				
Sampling time	1 s			
Alarm response threshold	> 70°C			
Alarm condition indicator	Red LED	Primary device: Red LED Replica device: Off	Red LED	Primary device: Red LED Replica device: Off
Digital display	Temperature (°C)	Primary device: Temperature Replica device: "A - A"	Temperature (°C)	Primary device: Temperature Replica device: "A - A"
Voice message (primary device)	<i>Attention! High temperature is detected. Evacuate the area immediately and call the fire service. (repeating)</i>			
Replica device alarm signal (where fitted)	—	3 beeps (0.5 s on, 0.5 s off), 1 s silence (repeating)	—	3 beeps (0.5 s on, 0.5 s off), 1 s silence (repeating)
Audio output level	≥ 85 dB @ 3 m			
<b>Temperature Alarm Hush</b>				
Alarm condition indicator	Red LED	Primary device: Red LED Replica device: Off	Red LED	Primary device: Red LED Replica device: Off
Digital display	Temperature flashes every 1 s			
Hush time	9 min			
Auto reset time	< 30 s			
<b>Test Condition</b>				
Digital display	0% LEL to 15% LEL	Primary device: 0% LEL to 15% LEL Replica device: "[ ["	0% LEL to 15% LEL	Primary device: 0% LEL to 15% LEL Replica device: "[ ["
Voice message	< 10% LEL level: <i>Your alarm is being tested. Your alarm will sound. Gas is detected. Close any sources of gas immediately. Ventilate the area and contact your service provider.</i> 10% LEL to 15% LEL level: <i>Danger! A significant gas leakage is detected. To prevent an explosion, do not turn on an electrical equipment, including lights.</i>			
Replica device test signal (where fitted) <sup>a</sup>	—	3 beeps (0.5 s on, 0.5 s off), 1 s silence (repeating)	—	3 beeps (0.5 s on, 0.5 s off), 1 s silence (repeating)
Audio output level	≥ 85 dB @ 3 m			
<b>Fault Condition</b>				
Fault monitor time	1 s			
Fault condition indicator	Yellow LED			
Digital display	F01			
Voice message	<i>The sensor is faulty. Please repair or replace. (repeating every 1 min)</i>			
Audio output level	≥ 85 dB @ 3 m			

## Specifications (cont.)

Fault Condition Hush	206-005	206-006	206-007	206-008
Hush time	10 h			
Digital display	F_1			
Wireless Interconnection				
Wireless radio interconnection operating frequencies	—	433 MHz, 868 MHz, 915 MHz	—	433 MHz, 868 MHz, 915 MHz
Number of interconnected devices	—	No limit within signal range	—	No limit within signal range
Maximum distance between interconnected devices	—	500 m in free air	—	500 m in free air
Group mode configuration indication on primary device	—	Display shows "P0" for 50 s	—	Display shows "P0" for 50 s
Group mode connection indication on replica device(s)	—	Display shows "J0" for 5 s, then "[ ]" if successful	—	Display shows "J0" for 5 s, then "[ ]" if successful
Group mode cancellation indication on primary device	—	Display shows "- -" for 1 s	—	Display shows "- -" for 1 s
Group mode configuration timeout	—	50 s	—	50 s
Wi-Fi				
Network standard	—		IEEE 802.11b/g/n	
Frequency band (2.4 GHz)	—		(2.4000 ~ 2.4835) GHz	
Antenna	—		Internal. Gain: 2.0 dBi	
Security	—		WPA/WPA2	
Encryption	—		WEP/TKIP/AES	
Radio range	—		70 m in free air	
Environmental				
Operating temperature	(-10 ~ +55) °C			
Operating humidity	(0 ~ 95) % RH, non-condensing			
Storage temperature	(-25 ~ +80) °C			
Storage humidity	(0 ~ 98) % RH, non-condensing			
Miscellaneous				
Dimensions (h × w × d) (excl. plug)	(90 × 90 × 35) mm			

<sup>a</sup> Following completion of a Test, the audible test signal from interconnected devices may take up to 10 s to silence.

## Ordering Information

	Wireless Interconnection	Wi-Fi
206-005	—	—
206-006	✓	—
206-007	—	✓
206-008	✓	✓

View the complete range of products at [www.numens.com](http://www.numens.com)

