# AN1801 LTE - 4G Communicator with Smoke Detector



**Accessory for Smoke Alarm** 

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# **Important Safety Instructions**

This user manual contains important guidelines for the installation and usage of the LTE device in combination with the SD360 smoke alarm.

Please read the manual thoroughly before you start using the device. It contains vital information on unit operation and installation. If you are installing this device the manual must be given to the householder.

The user must regularly check the proper functioning of the device. The manufacturer cannot be held liable for any damage or loss caused by any incorrect use or incorrect operation of the device.

In case of damage caused by disregarding the guidelines, the warranty becomes invalid.

# Safety guidelines

- The operation temperature range is from 0°C to 49°C (32°F to 120°F).
- The device is intended for use in dry and clean places with a residential function.
- Protect the device from moisture, heat and water splashing.
- The guidelines for the battery usage must be regarded.
- Do not expose the device to strong vibrations.
- Do not let it fall from height.
- Do not use in an environment where any inflammable gases, vapors or dust are present or could be present.
- Repair of the device may only be carried out by people, trained for repair.
- If the device must be repaired, only original replacement components may be used.

# Use in accordance with the regulations

The purpose of this device in accordance with the regulations is sending SMS text messages and making telephone calls after an alarm situation. Other uses are not permitted and may annul the warranty.

## **Product and battery recycling**

When disposing of this product, separate the product and the CR123A batteries from other waste streams to ensure that it can be recycled in an environmentally sound manner. For more information on collection and proper disposal, please contact your local government office or the retailer where you purchased this product.

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#### 1. GENERAL DESCRIPTION

The 4G communicator AN1801 is a battery operated 4G module used to send out an alarm after the input is triggered by the smoke detector SD360.

The 4G Smoke Detector, AN1801 is a combination of the AN1801 Radio module connected with a SD360 smoke alarm.

The default settings for standard use are:

- In case the output alarm of SD360 smoke detector is activated, the 4G communicator sends an alarm SMS text message and calls the phone numbers as programmed by the user.
- In case the batteries need to be replaced, the 4G communicator sends a
   'battery low'
   SMS text message to the phone numbers as programmed by the user.

Please refer to the manual of the SD360 smoke alarm for installation instructions and the description of the behavior of the smoke alarm.

#### 2. GETTING STARTED

To get started with the AN1801 at least the following steps need to be taken in following order:

- 1. Open the cover
- 2. Insert a SIM card (without PIN code)
- Insert the battery on AN1801
- 4. Close the cover
- 5. Insert the battery of SD360
- 6. Mount the AN1801 to the ceiling
- Set up by SMS and program at least one telephone number and perform a test
- 8. LED indicators

These steps are further explained in this chapter.

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# 2.1 Open the cover

# Push the bottoms of 3 buckles and open the cover



Fig 1

# 2.2 Insert a SIM card

Push the black cover outward slightly to open the holder. Before installing the SIM card should have PIN code removed. Insert a SIM card into the module.

(A PIN code can be changed or removed by putting the SIM card in to any mobile phone and entering the 'security' menu).

Note: Make sure the SIM card is inserted before the batteries are inserted. In case of a SIM card change, please first remove the batteries (and remove any other external power supply).

# 2.3 Insert the battery

Insert the batteries (CR123A) in the module. Use the + / - indication for the correct placement.

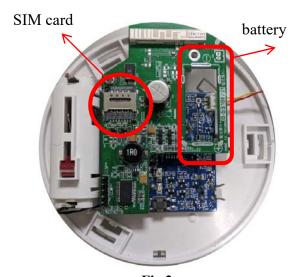


Fig 2

# 2.4 Close the cover (Fig 3)

# 2.5 Insert the battery of SD360

Insert the batteries in the SD360. Use the + / - indication for the correct placement.







Fig 4

# 2.6 Mount the AN1801 to the ceiling

#### 2.6.1

Mount the Base in which the AN1801 is fixed to the desired place to the ceiling, and screws which can be found inside the AN1801 box. Please refer to the manual of the SD360 smoke alarm for the ideal location and installation instructions.

# 2.6.2

Bring the AN1801 and the base module to each other at the correct position and turn the detector gently clockwise until it is closed and locked.



Fig 5



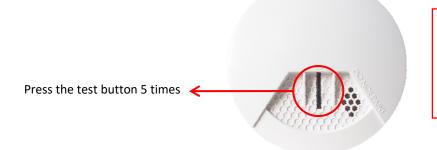
Fig 6

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# 2.7 Set up by SMS and program at least one telephone number and perform a test

# 2.7.1 Booting up the device

Press the test button five times to wake up the 4G module to boot up and enters standby mode.



#### Note:

Wake up 4G modules before performing any SMS setup and testing

Fig 7

# 2.7.2 Setting SMS command

You can program many different function codes in one text message with SMS command format.

\*12\*1234 # [function Code 1] # [function Code 2] # [function Code 3] #.......

# (Please refer the page 8: 3. SMS Command & 4. Function Codes)

Example: Store the numbers, maximum 3 numbers.

- 1. Send the text SMS to the number of device.
- 2. The format of text SMS is:
- \*12\*1234#11[ number 1 ]#12[ number 2 ]#13[ number 3 ]#
- 3. When the setting is finished, the sender will receive the reply as below.
- 11[ number 1 ]#12[ number 2 ]#13[ number 3 ]#OK

# 2.7.3 Test Smoke Alarm

Press and hold the button for around 4 seconds until the horn sounds during standby, AN1801 will automatically send SMS to all the numbers you set then call to all numbers in sequence. SMS content is "Test mode Alarm"

If the device is not in standby mode, press the test button will not active the 3G module.

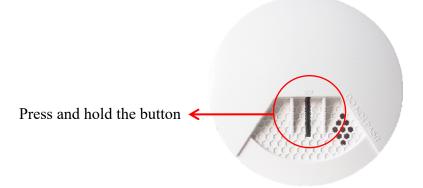


Fig 8

2.7.4

When the battery voltage is low, AN1801 will automatically send SMS to all the numbers you set.

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# 2.8 LED Indicators

Status	Green LED	Blue LED	Module Green LED (Hide on PCB)	
Booting up	0.5s ON / 1.5s OFF	OFF	Unregistered the network:	
Standby	OFF	0.5s ON / 1.5sOFF	0.5s ON / 0.5s OFF	
Notification	OFF	0.1s ON / 0.1s OFF	Registered the network :	
no number	0.5s ON / 0.5s OFF	0.5s OFF / 0.5s ON	0.3s ON / 2.7s OFF	
Sleep	OFF	OFF	OFF	

## 3. SMS Command

Feature	SMS Command	Default SMS content	NOTE:
Check Device Version	*20*[password] #		
Check stored numbers	*21*[password] #		
Alarm content	*30*[password] #[SMS content]#	Smoke Alarm	Check the SMS
Test Mode content	*31*[password] #[SMS content]#	Test mode Alarm	content, please
Low Battery content	*32*[password] #[SMS content]#	Low Battery	left it empty.

# 4. Notification SMS content

Issues	Notification SMS content
Enter Test Mode (press Switch)	Test mode Alarm
Smoke detection	Smoke Alarm
Battery low voltage	Low Battery-Detector / Low Battery-Communicator
Auto Reply SMS	Module auto test
Smoker detector case open	Detector case is opened
Smoker detector case close	Detector case is closed

# 5. Function Codes

You can program many different function Codes in one text message with programming SMS.

The programming SMS format: (the character limit for a single SMS is 160 characters)

\*12\*[Password] # [Function Code 1] # [Function Code 2] # [Function Code 3] #......

Feature	Function Code	Description	Default
Modify password	01 [ password ] #	Password accepts 4 digits only	1234
Store the numbers	1 [ Y ] [ phone number ] #	Y= phone number 1, 2 or 3 phone number accepts 3 to 15 digits	None
Delete stored numbers	1[Y]*#	Y= phone number 1, 2 or 3	None
Wakeup standby time	20[Standby Time]#	Standby Time:1 to 20 mins	3
Call waiting time	21 [Call waiting time] #	Call waiting time :10 to 99 sec	20
Interval "Auto Reply SMS"	22+[Time]#,	Time: 1 to 99 days	30
Reset	999#	Recovery the default setting values Green & blue LED flash interactively.	

# NOTE:

- 1. If the password is wrong, SMS reply is "Password Error".
- 2. If the SMS command is wrong, SMS reply is "Control Code Error".
- 3. If the function code is wrong, SMS reply is "2320# Error".

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