<u>/ SMART</u> ドレ SENSOR®
Intellit Instruments [™] Pro

SULFUR DIOXIDE GAS METER

AS8805 User Manual



Version: AS8805-0-1

WARRANTY CARD NAME EMAIL ADDRESS PURCHASE DATE SERIES NO

UNIT

Warranty condition

MERCHANT SIGNATURE

1. Started from the sold date within one month, any damage that not due to wrong handling, wrong use, and no any scratch at the unit surface, packing material was keep in good condition, we will replaced one by one with same model.

2. Started from the sold date product have one year warranty, life time free maintenance, but not included any accessories and Gas sensor.

USER SIGNATURE

but not included any accessories and Gas sensor.

3.All human being damage, self dis-assembled the unit, warranty sealed broken, not suitable use in any not recommended environment will not be warranty.

4. Within the warranty period, shipping cost paid by the end user.

SERVICE HOTLINE:400-699-1718 OFFICIAL WEBISTE:www.smartsensor.cn

SERVICE HOTLINE:400-6999-1718

CONTACT PHONE
NUMBER
PURCHASE PRICE

MODEL NO

INTRODUCTION

- Thank you for purchase of Smart sensor gas meter products.
- ➤ This instruction manual provided the necessary information for how to use it, what need to be careful, what is important notice. To get the maximum performance of this product, please read this user manual in detail before use this instrument, also please keep it in good place, for later reference
- ▶ Before use this instrument, please make some simple test to make sure the function is normal.

DECARATION

SPECIAL DECARATION

- ➤ You, as the end user, are legally bound (Battery ordinance) to return all used batteries and accumulators, disposal in the household garbage is prohibited!. You can hand over your used batteries/accumulators at collection points in your community or wherever batteries /accumulators are sold!
- Deposit: Follow the valid legal stipulations in respect of the disposal of the device at the end of its lifecycle. Our company reserve all the copyright, above user manual and related contents, if no any signed and approved document provided by "Smart Sensor Holding Co., Ltd.", can't be plagiarize at any different way, reprint or copy. Also included other method, for example, digitalize, electronic etc.
- ➤ Our company resolved all the right to update or change the contents of this operation manual without notice.





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1.NOTICE BEFORE USE THIS METER

WARNING AND PRECAUTION

Not suitable operation or use in a bad environment, will reduce the performance and accuracy of this meter, to safety and effective to use this meter, please read the following operation procedure and used it in suitable environment.

- A Please read the instruction manual carefully before use this unit.
- ▲ The gas sensor window and gas filter must be keep cleaned,
- ▲ If window was block or gas filter dirty, will cause gas sensor reading less than the actual measured concentration.
- ▲ The sudden change to the air pressure will cause the fluctuation of the carbon dioxide measured reading.
- of the carbon dioxide measured reading.

 A Charge the battery or repair the unit, must be in a safety environment to perform this action.
- A Prohibited charge the unit battery under a well.
- A Replacement parts or Sensor is not recommended, it will cause seriously safety problem.
- A Repair the unit must be handled by a authority person or agent, non -approved parts replaced to the unit will caused
 - or wrong measurement of the unit.mal-function of the unit Also reading the user manual before repair is highly recommended.
- ▲ Notice: If the gas reading over the highest value and then suddenly drop down or reading unstable, that means the tested gas is over the exploded range, it is very danger situation.
- ▲ The operation range of this unit is from -10 C to 50 C.
- All parts can't to be changed or replaced with other un-authority parts, highly recommended ship it back to a authority agent for repair. Don't connect the unit to other instrument.
- ▲ If you need to use sample pump, you must buy our As8930 sample pump, it design to fit in this unit.
- A This unit must be work with the built in lithium-ion battery, don't be replacement with other lithium battery.
- ▲ Under the exploded environment, don't dis-assemble the battery.
- Before the battery fully discharge, please charge it on time, otherwise the battery life will be shorten due to fully discharge it.
- A If unit don't used for a long period, please fully charged it before storage, it can prevent the battery fully discharge to shorten the battery life.

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All above information and contents are be confirmed and accuracy, trusty.

Our company is no any liability for the user to use this product in their own way.

Under any circumstances, our company has no any liability for any information included in this manual that caused any charges and cost. No any notice for the change of this manual.

WARRANTY

We warranty, AS88 series gas meter of "Smart Sensor", is included from defects in material and workmanships for a period of one year after purchase. This quality warranty included the sensor, battery pack. Start from shipping date, within 15 month, we warranty no any defects in material and workmanship within 15 month.

MANUFACTURING STATEMENTS

Thank you for buying and using Smart Sensor AS8805 Sulfur dioxide (SO2) Gas monitor.

The unit has been designed, manufacturing, tested and proven under professional quality team.

The unit should be reliable to use and operate under the reasonable care and maintenance described in this instruction manual.

- ♠ Prohibited disassemble this unit at any dangerous environment
- ▲This product meets the following standard and regulation.

JJG551: and GB3836 series anti-explosion standard

PACKING LIST

The gift box should be contain the following items, if you find any items missing or missing page of the instruction manual, please contact our sole agent that they sell this product to you.

➤ SULFUR DIOXIDE (so2) GAS METER --- 1 pcs
 ➤ Instruction manual --- 1 pcs
 ➤ Charging adaptor --- 1 pcs

CERTIFICATION

ANTI-EXPLOSION CERTICATION

ANTI-EXPLOSION MARKING : Exib II B T3 Gb
PRODUCT MARKING: Q/WC 001-2016

PROTECTION LEVEL: IP65

PRODUCT SPECIFICATION

Sensor specification				
Gas Sensor	Range	Resolution		
Sulfur Dioxide (SO2)	0~20 PPM	0.1 PPM		

Product specification				
Operation current	10mA	Short circuit current	<3A	
Operation voltage	3.7V	maximum open circuit voltage	<4.2V	
Battery type	754060P	Display Type	Segment type LCD	
Operation humidity	15% ~95%	Operation temperature	-10°C ~ 50°C	
Storage temperature	0~40℃	Weight	147.5 gram (included battery)	
Dimension	66.35mm X 95.8mm X 52mm			
Battery working runtime	60 hours (no alarm)			

3. OTHERS ISSUE

MAINTENANCE

The following guidelines should be followed to achieve good maintenance for AS8805 unit.

CLEANING:

- -If necessary, wipe the outside surface of the unit, please use the soft, clean cloth.-Never use any solvent or cleaning solutions.-Make sure the rubber buttons are free of dirties.
- -To clean the sensor opening, please use the clean, soft cloth or soft brush.

CHARGING THE BATTERY

- -The lithium-ion battery suggested to be fully charged before using the AS8805.
- -To charge the battery, plug the connecting lead wire of the battery charger into the charging port (micro USB) located at the bottom of the unit. The port is protected by a rubber flap, so need to release the flap before charging.
- -The battery should be fully charged in 4-6 hours
- -Once fully charged, the unit will be good enough to work for 6 hours operation.
- -The shaded area of the battery indicator shows full once the battery is fully charged.
- -If all shaded area only have one bar is left, the battery need to be charged at once.
- -When the battery is low, the unit might emit a periodic alarm sound to alert you to charge the unit.

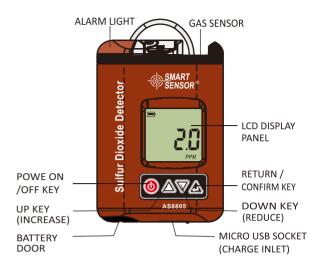
SECURITY CODE SETUP

If you forget the security code, you can force the system to reset to factory preset code by press $\blacktriangle + \blacktriangledown + \longleftarrow$ key at the same time, then the security code back to factory preset code: 123



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OUTLOOK OF THIS INSTRUMENT



INTRODUCTION

The AS8805 Sulfur dioxide (SO2) Gas Meter is a portable and handheld instrument that is capable to use continuously monitoring Sulfur dioxide gas, when detected Sulfur dioxide gas, the concentration will shows in the LCD display. The unit also provided user to configure high and low alarm . The unit will have audio and visual alarm once the alarm condition is exceeded.

2. OPERATION INSTRUCTION

2.1 POWER ON/OFF

1. To turn on the instrument, please depress and hold the Φ KEY for 3 seconds, the unit will be turn on, then the lcd will light up all icons and segments. Then the unit will go to 18 seconds warn up countdown time, when countdown completed, unit will enter normal gas monitoring mode.



2. To turn off the unit, please depress and hold the Φ button for over 3 seconds at normal gas monitor mode, then the unit will be power off.

2.2 MONITOR MODE

After countdown completed, unit will enter normal gas monitoring mode. It will display the concentration of Sulfur dioxide (SO2) gas, unit in: PPM.

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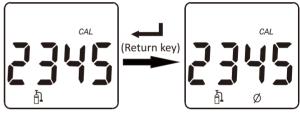
APPENDIX DESCRIPTION FOR CALIBRATION

First step is to calibrated the zero point, at that time the unit under calibration must be place as fresh air environment, press [return] key to store the calibrated zero point value than go to second step, the second step is to calibrated the cal. point, at that time you should supply the cal. gas by a standard cal. gas bottle with correct silicone tube, (the air flow must be set to 0.5 liter/minute), there are two method to calibrated this cal. point, first one is automatic store the calibrated data, Don't make any action, just connected to cal. gas bottle then wait for unit to got the stable signal then system stored it to the memory. The second option (this is the preferred method) is to press the —I key again, go to manual calibration mode, the LCD will display the below screen, when the value become

→ ZERO CAL

stable, store the value by press — key. If unit success passed the calibrated screen will showed "P", mean it passed the calibration and value stored to memory. If failed calibration, a flashing "F" will be on the screen, means failed this calibration, please repeat the calibration again.

(zero point calibration)



Standard cal. gas calibration (Auto)

Standard cal. gas calibration (Manual)

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CAL GAS BOTTLE CONCENTRATION SET UP

After success enter the security code, it will go to cal. gas concentration calibration mode. Press ← key once will go to value editing screen, press or key to get your desired value as your cal. gas bottle showed calibrated value.



After finished press ← key again for confirmation. After confirmed it will back to last mode. If no need to change the value, at the cal gas mode, press ▲ key once go to security setup mode. The factory pre-set value is: 20.0 PPM.

CALIBRATION

At cal gas bottle concentration setup model, press key will go to calibration mode. At fresh air environment press key to perform zero calibration, after finished zero point calibration, press key again to calibrate the cal. point with standard cal. gas bottle (the air flow of the cal. gas should be 0.5litre /minute), wait for auto save the value the value or press key go to manual save. If it is auto



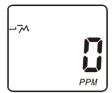
save, after count down timer finished it will back to normal monitor mode: If it is manual save, you need to press Hey again to back to normal monitor mode.

NOTICE: If security code was changed or user forget security code, please refer to security code setup mode at page 11.

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PEAK VALUE DISPLAY MODE

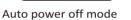
At normal monitor mode, depress \triangle key once go to "Peak value" display mode. Under this mode, the screen will shows the peak value of the detected gas. Press \longleftarrow key to reset the value. Press \diamondsuit key return back to normal monitor mode.



AUTO/MANUAL POWER OFF MODE

At normal gas monitor mode, press ▼key once go to Auto/Manual power off model, press ▼ key once again will change to [ON] or [OFF] sequentially, screen show "OFF" means manual power off mode, the unit will not turn off until user turn it off, screen show "ON" means it is in auto power off mode, the unit will power off after 10 minutes. Press ← key to confirm it and back to normal gas monitor mode.





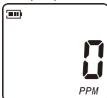


Manual power off mode

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BACK LIGHT

At normal gas monitor mode, press [return] key will "on"or "off" the back light, after turn it on, it will automatic off the back light after 60 seconds if no any key in detected.



LOW BATTERY ALARM

When battery empty, the unit might emit a periodic alarm sound to alert you to charge the unit, if no action to charge it, the alarm will continue and the unit will be turn off after 10 minutes. To keep the instrument in good condition and accuracy, please charge the battery immediately if battery alarm sound happened.

LOW CONCENTRATION ALARM SETTING MODE



At warn up count down mode or normal gas monitor mode, depress ▲ key for a moment, unit will go to low concentration alarm setup mode, press [Return] key once will go to the value editing screen, then press ▲ or ▼ key to get your desired value, press [Return] key again for confirmation, after confirmed it will back to the last mode. Factory pre-set low concentration alarm value is: 5.0PPM.

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HIGH CONCENTRATION ALARM SETTING MODE



At the low concentration alarm setting mode, press ▲ key, unit will go to high alarm setting mode, press → key once will go to the value editing screen, then press ▲ or ▼ key to get your desired value, press → key again for confirmation, after confirmed it will back to the last mode.Factory pre-set high alarm concentration value is: 10PPM.

SET UP AND CALIBRATION MODE

At warn up count down mode or normal gas monitor mode, press \triangle and ∇ key at the same time for more than 3 seconds will go to security code mode, then press the security code one by one as below procedure (the factory pre-set security code is "123").



You can enter the first security code digit by press ▲ or ▼ key, then press ➡ key go to second digit, repeat the above step get you second digit, press ➡ key again to go to last digit, repeat the step again to get you last security code, if security code correct, it success go to setup mode, if failed you will back to last mode, or you can press ▲ + ▼ + ➡ key at the same time to reset the system and then go to this set up mode.

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