Zwinsoft

ZWIN-ESG1006 Composite gas detector

Product Specifications

天津智易时代科技发展有限公司

Tianjin Zwinsoft Technology Co.,Lt

一、 Product Overview

Zwinsoft ZWIN-ESG1006 three-in-one composite gas detector is an early fire warning 、 product mainly used in electrochemical energy storage battery PACK. This product is usually installed on the outside or inside of the battery PACK box, or on the high wall or ceiling of a small energy storage battery cabinet. This product has RS485 communication function.

This product uses the built-in detector to detect the smoke concentration, CO concentration, and temperature in the air in real time, and transmits data through RS485 and corresponding protocols. Timely detection and transmission of various data of the air environment. This product has the following characteristics:

Real-time: The product monitors various indicators of the air environment in the area in real time.

■Accuracy: The sensor used has the advantages of low power consumption, high precision, high sensitivity, wide linear range, and strong anti-interference ability. In addition, the self-developed motherboard and program have achieved high integration, excellent anti-interference algorithm, light and compact size, stable and reliable performance, and good repeatability and stabi

Ease of installation: There are four screw holes on the product shell, which is suitable for various equipment installation environments.

二、 Product Parameters

Serial number	Name	Unit	Technical Parameters

1	Working voltage	V	12V
2	Working temperature	℃	-10℃~+50℃
3	Detection type	-	Carbon monoxide, smoke, temperature
4	Temperature measurement range	℃	-55℃~+125℃
5	Temperature measurement accuracy	℃	±0.0625℃
6	Carbon monoxide measurement range	PPM	0~5000PPM
7	Carbon monoxide measurement accuracy	PPM	±1PPM
8	Smoke concentration measurement range	PPM	200~10000PPM
9	Smoke concentration measurement accuracy	-	$\leqslant 0.6\,(R_{3000ppm}/R_{500ppm}\,C_3H_8)$
10	Communication method	-	RS485
11	Installation method	-	Screw fixing

二、 Communication Protocol

The factory default device ID is 01.

1. Read command

(1) Read slave real-time value

Host sends: 01 03 00 00 00 06 CRC

Slave replies: 01 03 0C C2 F5 70 41 65 3E D0 44 9A 99 C5 41 D2 9D

The returned data is float type,

C2 F5 70 41 represents carbon monoxide concentration 15.05PPM

65 3E D0 44 represents smoke concentration 1665.95PPM

9A 99 C5 41 represents temperature 24.7℃

(2) Read slave SN:

Host sends: 01 03 10 00 00 06 CRC

Slave replies: 01 03 0C 82 33 14 30 00 00 94 69 09 A7 1D 09 B7 38

82 33 14 30 00 00 94 69 09 A7 1D 09 represents the SN number

(3) Read the slave version number:

The host sends: 01 03 10 06 00 07 CRC

The slave replies: 01 03 0E 58 46 2D 48 56 33 31 2D 53 56 31 30 20 20 9C B7

58 46 2D 48 56 33 31 2D 53 56 31 30 20 20 represents the version number

(4) Read SN+version number:

The host sends: 01 03 10 00 00 0D CRC

The slave replies: 01 03 1A 82 33 14 30 00 00 94 69 09 A7 1D 09 58 46 2D 48 56 33

31 2D 53 56 31 30 20 20 65 CC

82 33 14 30 00 00 94 69 09 A7 1D 09 represents the SN number

58 46 2D 48 56 33 31 2D 53 56 31 30 20 20 represents the version number

2. Write command

Modify device ID:

Host sends: 01/FE 06 00 01 00 YY CRC (YY is the new ID)

Slave replies: ID 06 02 00 ID CRC