Vehicle terminal device

Product User Manual

Product Name: Long standby recording vehicle positioning terminal

Product model: BSJ-A5E-8W

Content

I. Product composition

1.1 Product overview

Product Name: Long standby recording vehicle positioning terminal

Product model: BSJ-A5E-8W

Product specifications: L77mm*W41mm*H30mm

1.2 Product picture

1.3 Product configuration list

1.3.1 Standard list

No	Name	Quantity	Unit	Remark
1	A5E-8W host	1	PC	With magnet
2	User manual、warranty card、certification	1	PC	Three in one
3	Package box	1	PC	
4	Charge cable	1	PC	
Note: The above is a standard configuration list of the whole set of products, and accessories outside the above range are subject to additional fees.				

1.3.2 Optional list

No	Name	Quantity	Unit	Remark
1	A5C-8 configuration line	1	PC	

Remarks: For the above accessories, please clearly identify the project requirements with the relevant personnel of the company. The terminal program will have different versions depending on the requirements.

II. Parameters and function operation instructions

2.1 Product parameters

No	Project	Specifications	Remark
1	Working voltage	DC 4.0V	
2	Working current	60~100mA@4.0V	
3	Current of low power consumption	About 30uA	
	Standby current	About 6-8mA	
4	Size	L77mm*W41mm*H30mm	
5	Positioning way	GPS+WIFI+LBS	
6	Positioning Accuracy	GPS positioning accuracy <10m (this data is for reference, the positioning accuracy is related to the terrain and time of the vehicle area). The base station positioning accuracy is based on the density of the base station in the interval.	This data is measured in the company laboratory
7	Communication network	GPRS Band: 850/900/1800/1900 MHz	
8	Communication way	TCP	
10	Working temperature	-20℃ ~ +75℃	
11	Storage temperature	-40℃ ~ +85℃	
12	Battery capacity	Lithium battery 5000mA	

2.2 Functions

On/off	Press and hold the button for 4 seconds, the red and yellow lights flash at the same time, the power indicator lights up one by one, and the device is turned on. Press and hold the button for 4 seconds, the red and yellow lights alternately flash to release the button; the red and yellow lights are off, the power indicator is off, and the device is turned off.
Power consumption mode	In the motion state, the GPS module is turned on, and the location data is sent according to the interval; In the static state, the GPS module is turned off, only the heartbeat data is sent, and when the vibration is detected, it is switched to the motion state.
Power saving mode	**During the set time period:** In the motion state, the GPS module is turned on, and the location data is sent according to the interval; In the static state, the GPS module is turned off, only the heartbeat data is sent, and when the vibration is detected, it is switched to the motion state. **Not in the set time period:** the terminal enters low power consumption.
Long standby mode	Support alarm mode and week mode, wake up according to the set alarm mode time point or the set week mode time point, the alarm mode supports up to 4 time points; The week mode supports up to 7 days and a time point.
Command mode	The GPS module is turned off in the command mode, and the vibration is not detected. The GSM module enters the sleep mode and only heartbeat data sent. Only when a checking command sent from platform or SMS, the location data will upload to the server.
LBS + GPS + WIFI	GPS positioning is performed in the power consumption mode and the power saving mode, and when the GPS is not located, the LBS is used for positioning; In the command mode and the long standby mode, the WIFI positioning is preferentially used. When the WIFI is not positioned, the GPS is turned on, waiting for GPS positioning, and when the GPS is not positioned, the LBS is used for positioning.
Serial port settings	Can set IP, port, domain name, alternate IP, APN, device number, power consumption mode, power saving mode, long standby mode, command mode
SMS settings	Can set IP, port, domain name, alternate IP, APN, device number, power consumption mode, power saving mode, long standby mode, command mode

SMS checking	Return current terminal parameters
Calibrate time	Support EPO and log server to calibrate time , GPS calibration time

Data transmission instructions:

(1) The default is power consumption mode.
In the motion state, the location data is sent according to the time interval;
In the static state, no position data is sent, only heartbeat data is sent.

(2) The power saving mode is within the set time period:
In the motion state, the GPS module is turned on, and the location data is sent according to the return interval;
In the static state, the GPS module is turned off, only the heartbeat data is sent, and when the vibration is detected, it is switched to the motion state.

The power saving mode is not in the time period:
The terminal enters low power consumption, and automatically wakes up when the set time period is reached.

(3) Long standby mode wakes up according to the set alarm mode time point or the set week mode time point.

(4) In the command mode, the GPS module is turned off, the vibration is not detected, the GSM module enters the sleep mode, only the heartbeat data is sent, and when the command sent from platform or SMS, the location data is reported to the server.

2.3 Product installation operation process

2.3.1 Device installation

(1) Inspect device
　　Check whether the equipment appearance is good, fittings is complete.

(2) Install SIM card
　　Open the device SIM card into the card slot. Please avoid overexertion is damaged, please make sure that a SIM card with Internet access, only at the same time satisfy the electricity and insert SIM card terminal can work normally.

(3) The terminal installation position requirements
　　A.Waterproof: choose place which is not easy to fill the position, kept terminal dry, pay attention to be far away from the air-conditioning outlet in case of the changes of temperature.Have condensed water accumulated inside the terminal seriously affect the service life of the product.

B.Shock: terminal can't hang up installed in strong vibration position for a long time.

C. Tamper-proof: terminal should be away from the car video intercom and electronic equipment, such as to prevent conduction and radiation.

2.3.2 SMS Setting format

Set IP online:
<SPBSJ*P:BSJGPS*T:120.025.232.237,6688*A:CMNET*N:18800000001*60:1*7H:0,30*7J:1>

Set domain name online:
<SPBSJ*P:BSJGPS*Q:www.baidu.com:1111*1X:120.025.232.237,6688>

SPBSJ	Message header
*P: BSJGPS	Password
*T: 120.024.176.195,6695	TCP IP/port
*A: CMNET	APN
*N: 13288888888	Device number (max: 16)
*7H	Working mode 7H:0,30 - Indicates power consumption mode, time interval is 30 seconds 7H:7H:1,18002200,10 - Indicates the power saving mode. The working time range is from 18:00 to 22:00. Not in this time period, the terminal enters low power consumption. 7H:2,R,0630,1200 - Indicates the alarm mode in the long standby mode, wakes up at 06:30 and 12:00 7H:2,W,1357,1600 - Indicates the week mode in the long standby mode, wakes up at 16:00 on Monday, Wednesday, Friday, and Sunday.
*60	Automatic answering
*7J	Automatic recording
Remark: 1. The communication IP and domain name can only be set one, set the IP to clear the domain name, and set the domain name to clear the IP. If the domain name cannot be resolved, the alternate IP connection is enabled. 2. The command of working mode setting is *7H, the terminal uses the last set value, no priority	

2.3.3 Status of indicator light:

Type	Status
GSM (Red)	Not light: Abnormal communication, lamp damage, no SIM card, no GPRS signal, the module enters low power consumption or shuts down
	Flash slowly: GPRS has a signal, but it is not online
	Flash quickly: GSM is in initialization
	Light constantly: Device is online
GPS (Yellow)	Not light: Damaged GPS module, lamp damage, GPS module off
	Flash slowly: The terminal searched for satellite signals but did not effectively positioning
	Flash quickly: In initialization
	Light constantly: GPS positioning
Charging light (white)	In Charging Status: Lamp 1 flash quickly -- Under 3.6V Lamp 1 light constantly , and lamp 2 flash quickly -- 3.6V-3.8V Lamp 1 and lamp 2, light constantly , and lamp 3 flash quickly -- 3.8V-4.0V Lamp 1 , lamp 2 and lamp 3 , light constantly , and lamp 4 flash quickly -- Above 4.0V Lamp 1 , lamp 2, lamp 3 and lamp 4, flash quickly together -- Fully charged
	Not In Charging Status: Lamp 1 light constantly -- Under 3.6V Lamp 1 and lamp 2,　light constantly -- 3.6V-3.8V Lamp 1 , lamp 2 and lamp 3,　light constantly -- 3.8V-4.0V Lamp 1 , lamp 2, lamp 3 and lamp 4,　light constantly -- Above 4.0V

III. Common problem analysis and after-sales services

3.1 Common problem analysis

Question	Reason	Solution
Online tracking offline	SIM card not enough credit	Charge credit or change
	SIM card contact problem	Install SIM card again or change
	Online tracking parameter setting error	Reset Parameters with correct format according to user manual
	Vehicle in underground car parks or tunnels, signal weak.	Go to good signal area
Cannot positioning	Vehicle in underground car parks or tunnels	Leave that area
	GPS Antenna side is not up to sky	Make the GPS antenna side up to sky

3.2 Attention

1. Electronic product please note waterproof.

2. Please keep the backup battery is enough.

3. When the temperature of the environment is more than the normal work of the terminal temperature range, advice without electricity.

4. When the vehicle in an underground parking lot, tunnel or garage, will influence the positioning signal. And possible communication network signal blind area lead to equipment can't monitor; after the vehicle out of the above areas, equipment will automatically return to normal work.

5. In abnormal situation, please do not repair itself. By linking the original attachment or unplug the connection between the various components damage, manufacturer is not liable.

3.3 After-sale service

1. During the one-year warranty, please feel free to contact us if there is any problem or damage not caused by human factors.

2. Not maintenance:

(1) Client dismantled privately

(2) Force majeure (floods, accidents, etc.)

3. More than one year damage or faulty maintenance will need to pay for raw material.

4. Free to provide customers with the purchase, use, installation and other consultation and technical services.