

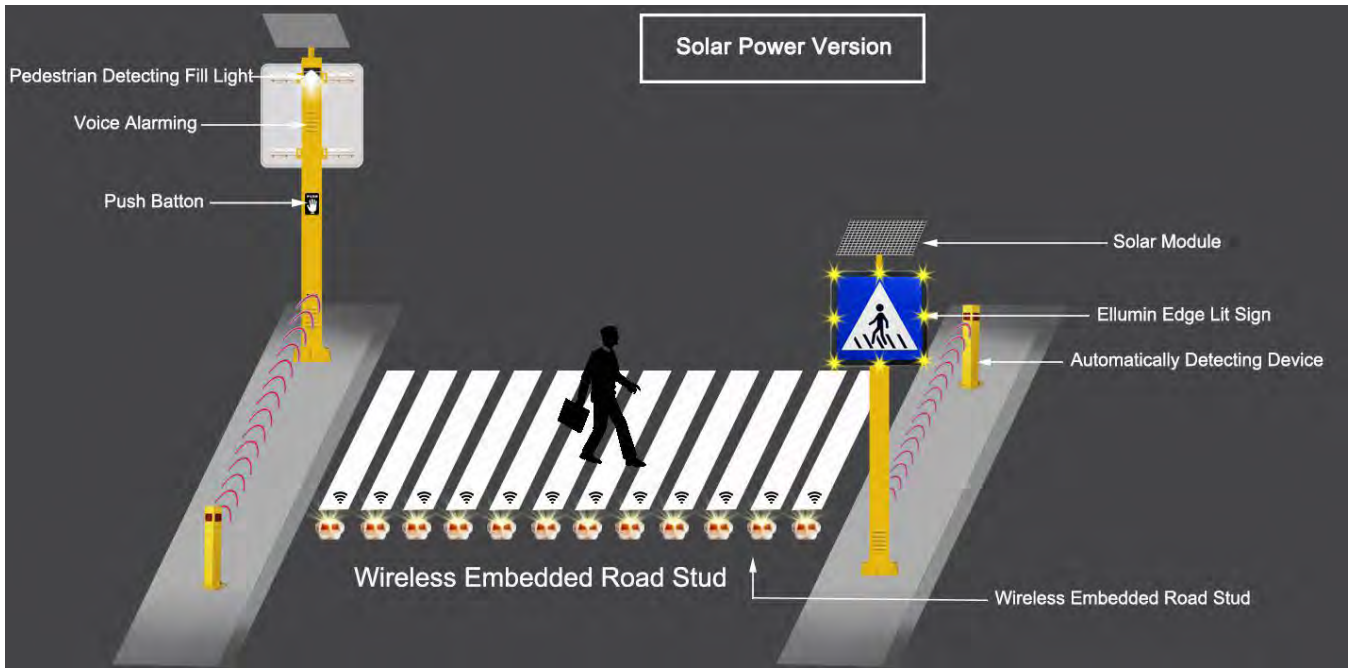
SMART PEDESTRIAN SYSTEM

—SUBURBAN TYPE



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The drivers have blind spots and the traditional pedestrian signs have bad warning effect. These two severe problems have survived for a long time which cause many of the terrifying traffic accidents. Ellumin company faces challenges, improves technology, optimizes product for solving remained unsolved traffic problems.

The Smart Pedestrian Crossing Sign adopts a new technology of edge lit. Infrared sensing system detect pedestrian movement for actuating warning system & illuminated system.

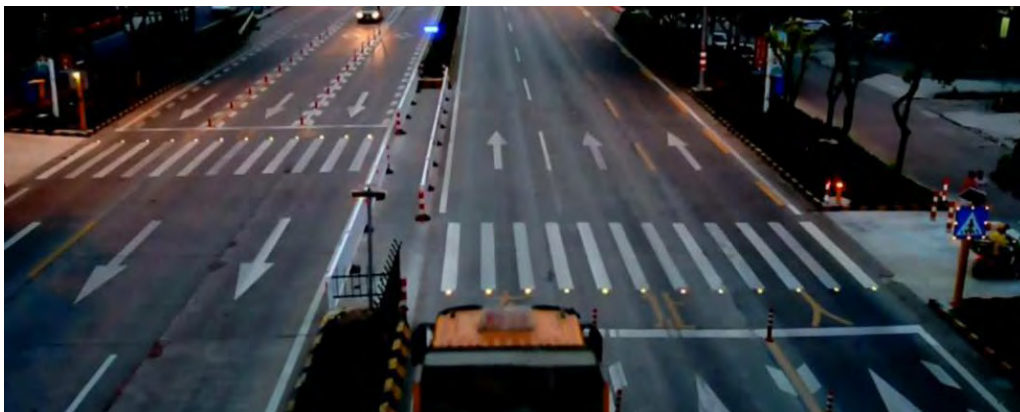
1. FUNCTION

- 1.1 At day:
- The system is dormant when doesn't detect pedestrians.
 - When the sidewalk system is triggered, the pedestrian sign and the embedded road studs will flash simultaneously, the voice alarming will turn on.
- 1.2 At night:
- The system is dormant when doesn't detect pedestrians.
 - When the sidewalk system is triggered, the pedestrian sign and the embedded road studs will flash simultaneously, the voice alarming will turn on.

2. FEATURES

- 2.1 Two patterns of activating way: Automatically Detecting Device & Touch Button to ensure the system.
- 2.2 Edge Lit Sign has flash function which has excellent visibility and outstanding warning effect for drivers.
- 2.3 Voice Alarming can use custom voice for warning drivers and pedestrians.

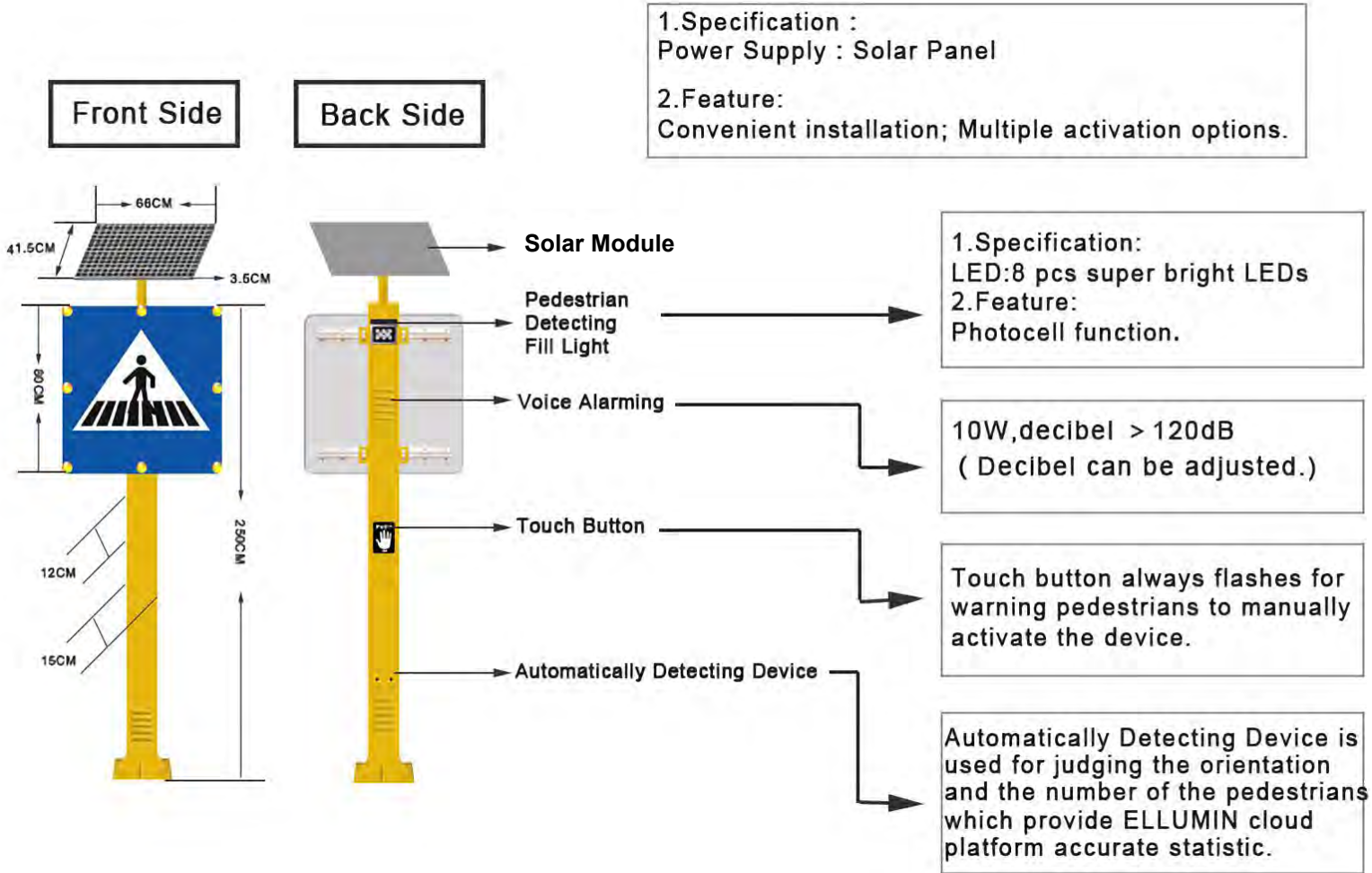
3. APPLICATION



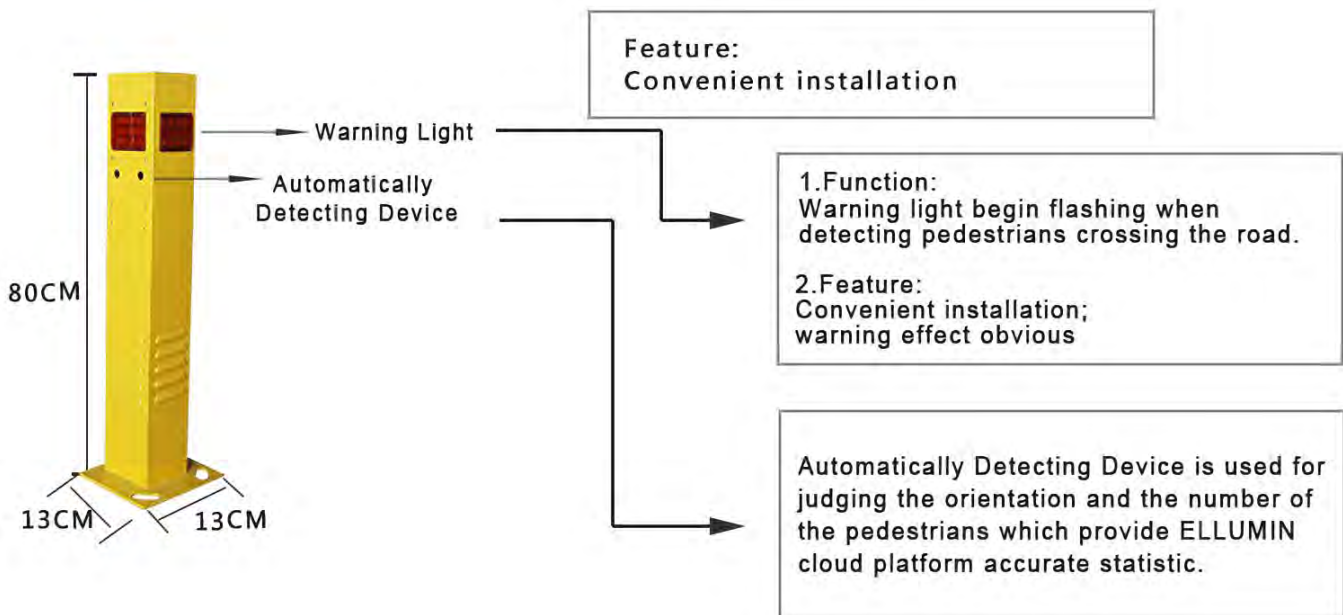
ACCESSORIES OF SUBURBAN TYPE VERSION

ACCESSORIES-INDUCTION PART

1. PEDESTRIAN INTELLIGENT INTEGRATED BOLLARD(Main Bollard)



2. PEDESTRIAN INTELLIGENT INTEGRATED BOLLARD(Sub-Bollard)



INTELLIGENT PEDESTRIAN SYSTEM CONTROL MODULE

The control module is for ensuring the system effective operation and upgrading the system operation efficiency. It integrates two core functions in one that receive activation signals from activation equipment and send working instructions to the warning equipment. And it can also satisfy the need of customized functionalities of the system.

ACCESSORIES-WARNING PART

1. EDGE LIT TRAFFIC SIGN



Traditional traffic signs have short visibility distances, and the static warning effect is poor. ELLUMIN company put the edge lit technology on traffic sign, it not only increases the visual distance, but also add flash function to warn drivers yield people who are crossing the crosswalk.

1.1 Specification

- Material: Double layer aluminium-plastic panel & 3M DG³ reflective sheeting & Stainless steel fasteners.
- 8 PCS 1W high power LED lamp.
- Aluminium-plastic panel, durable which is hard to bend.
- With anti-graffiti overlay.
- Size and pattern can be customized.

1.2 Features

Simultaneous flash LEDs - Greater increases drivers awareness in high-risk, and high-accident intersections.

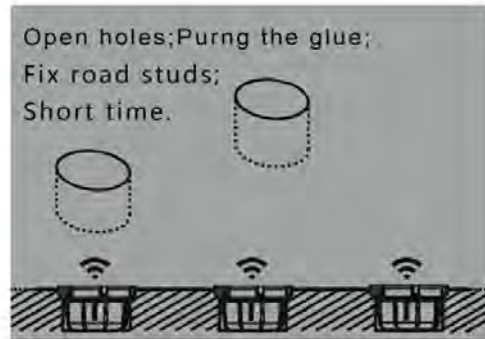
Slim design: The thickness has no difference with the normal aluminum sign; Convenient installation.

Aluminum wrapping edge - Pattern design : New advanced anti-oxidation Aluminum wrapping edge, 2-3 times durable than old silicon wrapping, effectively extend the life time.

2. EMBEDDED ROAD STUD



BL-004SU



1. Specification

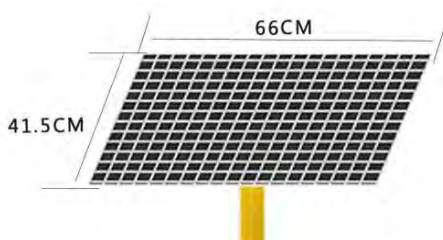
- Size: $\phi 170 \times 98.2 \text{mm}$
- LEDs: 8 pcs super bright LEDs
- Power supply: solar module
- Lighting time: 150H after fully charged in flashing mode.

2. Features

- Robust Construction, suitable for harsh conditions.
- Possibility of integration with enforcement systems.
- Low energy consumption.
- Convenient installation, not need to open the connections.
- Easy Replacement: base (fixed in the pavement), main body (removable).

ACCESSORIES-POWER SUPPLY PART

1. SOLAR MODULE



1.1 Specification

- Power supply: DC 12V40W solar module (80W optional)
- Size: 66*41.5*3.5cm
- Protection Index: IP67
- Battery: DC12V36AH

1.2 Features

- Convenient installation.
- Suitable for use in rich solar energy areas.
- Not affected by local grid power outages.

ELLUMIN CLOUD PLATFORM

DESCRIPTION

ELLUMIN cloud platform is an important part of the smart city which can monitor the operation of the devices, as well as collect and analyze the devices' statistic for you.

FUNCTION

1. MONITORING DEVICE

Monitoring device's operation and display in map pattern, and support to filter the dedicated device.

The screenshot displays the ELLUMIN Cloud Platform interface. At the top, there is a navigation bar with the ELLUMIN logo and menu items: APPLICATION, DEVICE MANAGEMENT, ALL ALARMS, and USERS. A TEST button with a user icon and a refresh icon is also present.

The dashboard features four main widgets:

- Devices:** 27 s, View All Devices
- Device Location:** 27 s, View Device Location
- Alarms:** 19 s, View All Alarms
- User Info:** 0 s, View All Users

Below the widgets, a message states: "Devices are found in your area: 27 s".

The central part of the interface is a map showing a road with several devices marked. A popup window for a selected device displays the following information:

```

ID: 030301000001d5
Longitude: 120.58216920525331
Latitude: 30.452366641574756
Type: Point surface emitting screen
Temperature: 12
BTEMP: 12
Voltage: 12470
Cut-Off Voltage: 14100
View details
    
```

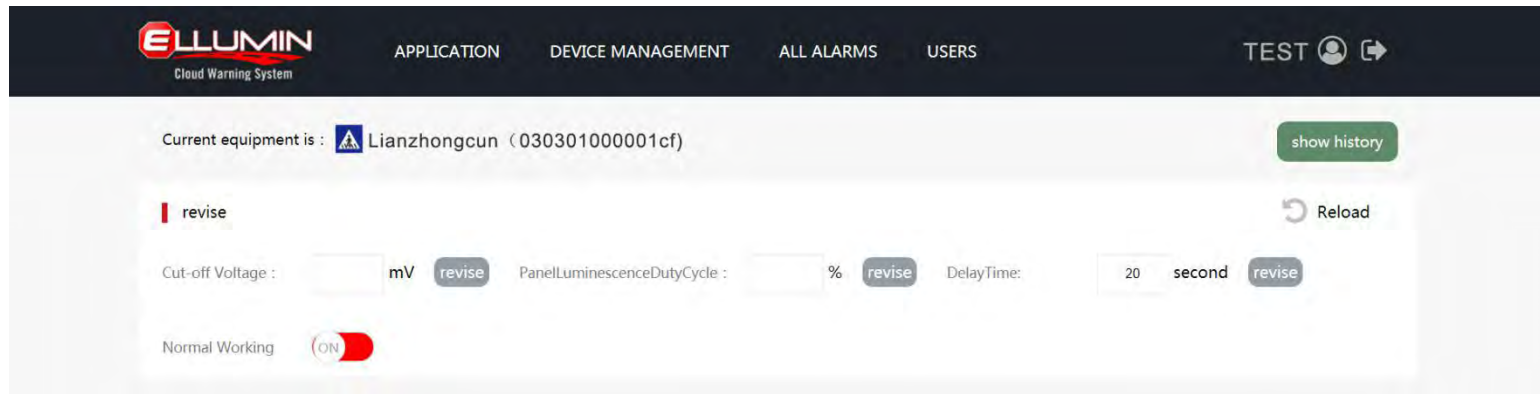
Below the map is a search bar labeled "Query Device:" with a search icon and two filter buttons: "Device Name" and "ID".

At the bottom, there is a table listing the devices:

Type	Device Name	Device Status	Notification Status	Electronic Label
	Lianzhongcun1			
	Lianzhongcun2			

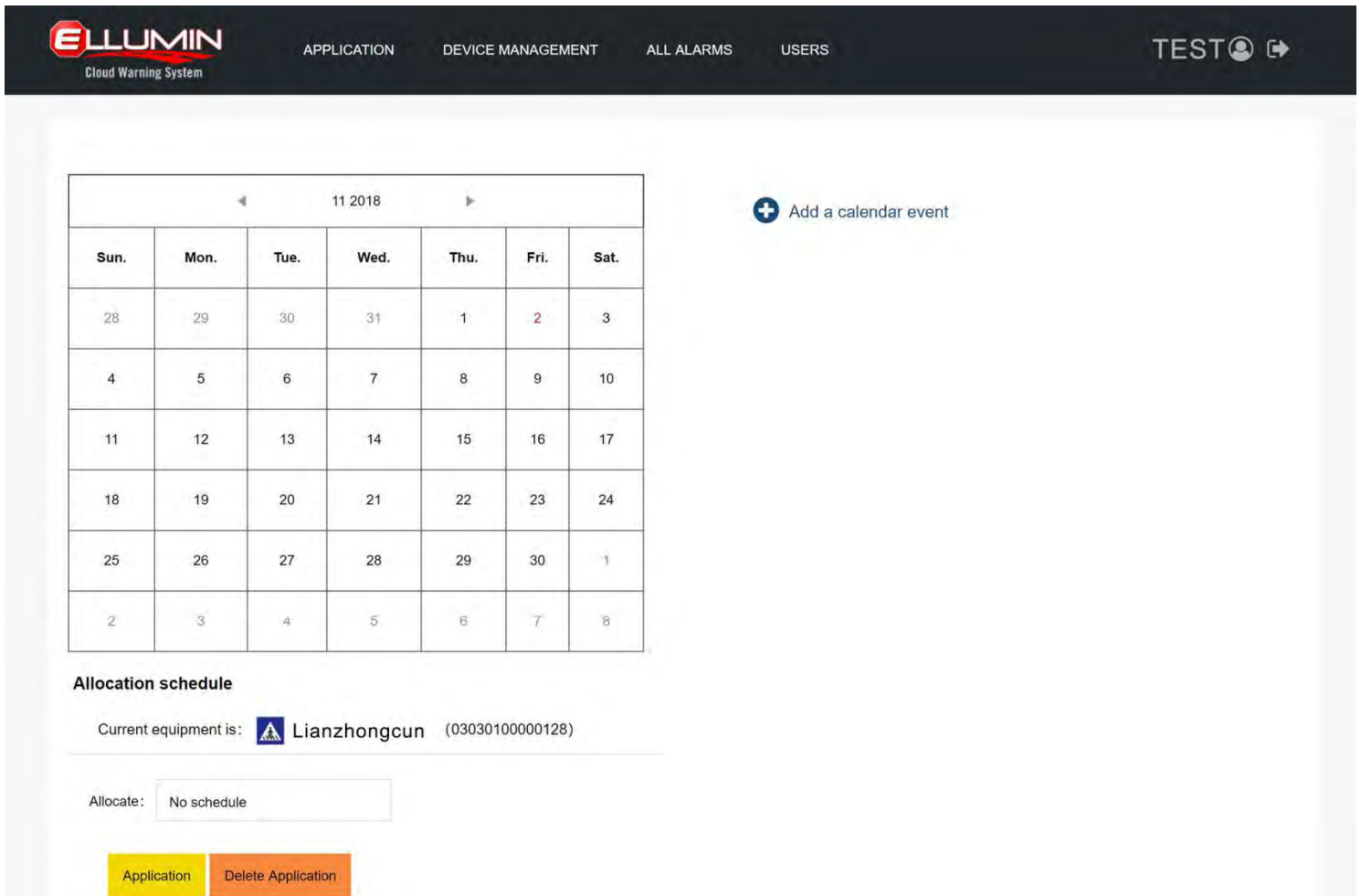
2.ONLINE CONTROL DEVICE

Remotely change the operating status of the device online.



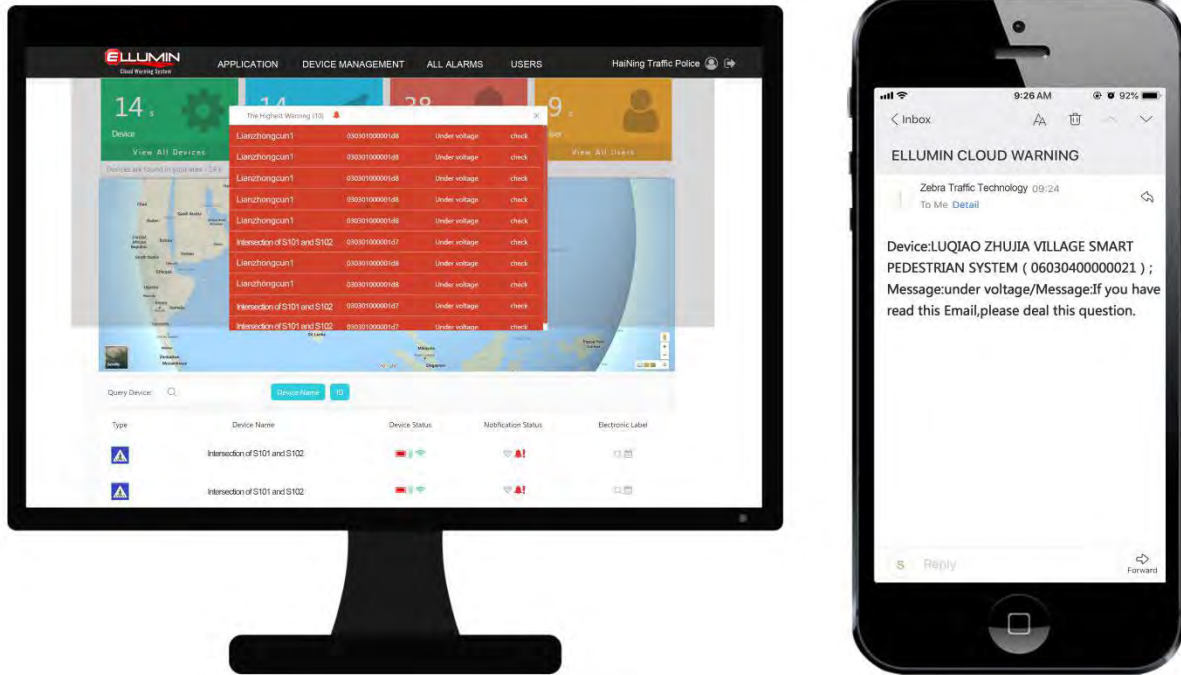
3.PROGRAMMABLE CONTROL

Customize Calendar Editor is easy to schedule Manage devices(Based on the Calendar Year with the Ability to Program in Holidays and Daylight Savings Time,Ideal for School, Business and Industrial Facility Work Schedules)



4. EMERGENCY NOTIFICATION

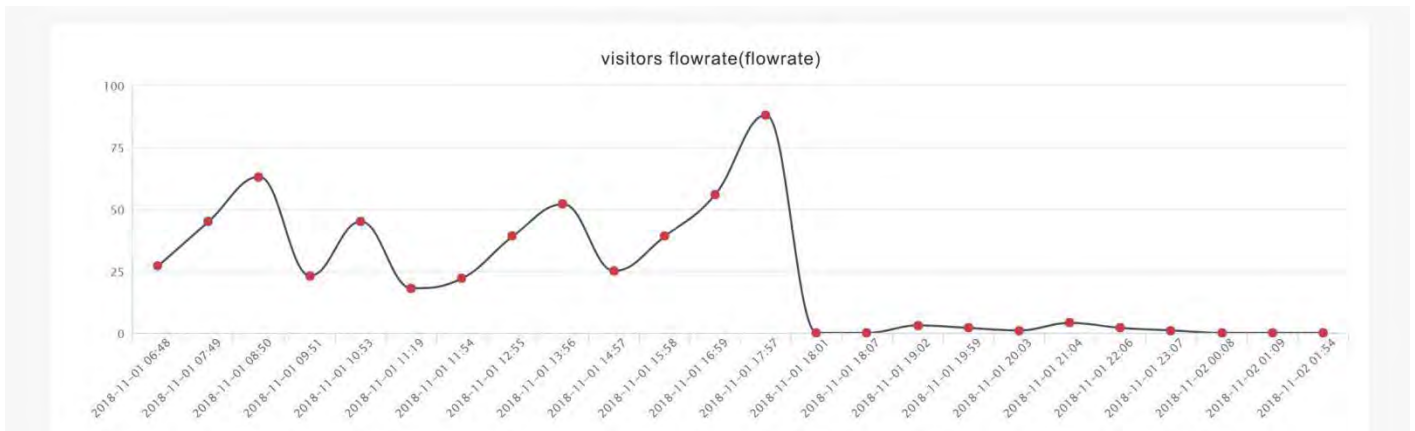
When a traffic emergency occurs or there is something wrong with the device, workers will immediately receive the notifications through E-mail and web page.



5. DATE REPORTING

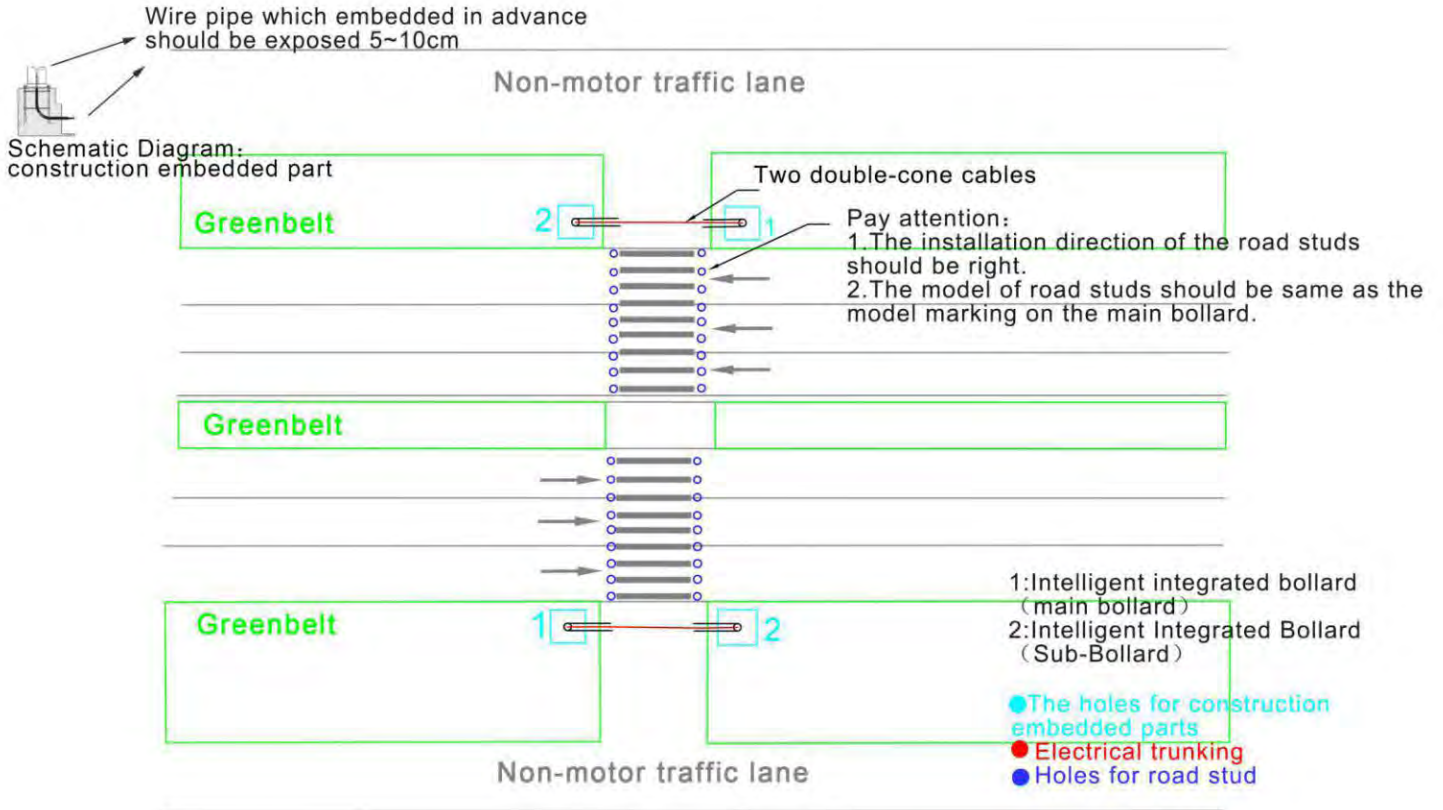
5.1 It can generate professional data reports by capturing, filtering, summarizing, analyzing and summarizing the data of the day.

5.2 Provide strong data support by historical data exported to EXCEL in chronological order.



Time	electric current (mA)	Delay Time (S)	Duty Cycle (%)	visitors flowrate (...)	UploadInterval(*1...	Temperature(°C)	voltage (v)
2018-11-02 01:41...	0	20	50	0	6	12	12.70
2018-11-02 01:09...	0	20	50	0	6	12	12.72
2018-11-02 00:08...	0	20	50	0	6	14	12.73
2018-11-01 23:07...	0	20	50	6	6	14	12.76

PRODUCT SPECIFICATION CONSTRUCTION DRAWING



Q & A

Q1.What is the intelligent pedestrian system?

The intelligent pedestrian system can accurately detect the movement of pedestrian when they are crossing the crosswalk to actuate the voice alarm system and the illuminate system(The illuminate system is consist of two parts:Flash pedestrian sign and embedded road studs) .

These two useful system warn drivers to slow down for yielding pedestrians as well as pedestrian should be cautious when cross the zebra crossing.

Q2.Is the embedded road stud pressure resistant?

Our company specially develop the embedded road stud for the severe challenge that the road stud located in the central line of the road is easy to be rolled by cars.

The road stud is approximately flush with the road surface after finishing installation which the pressure resistant degree can be around 30T.

Q3.How the detection technology to work?

There are three patterns of detection systems.

3.1 Infrared radiation detection system:This system is like to install an infrared gate at the crosswalk:When the pedestrian cross the infrared the intelligent pedestrian system will be actuated.

3.2 Camera detection system:The camera can detect the pedestrian on the crosswalk:The intelligent will be actuated at once the pedestrian entered the detection area.

3.3 Infrared thermal imaging detection system:The infrared can induce the body temperature to actuate the intelligent pedestrian system.(The system will analyze the movement of the pedestrian to distinguish the pedestrian who cross the road with the other people in advance.)

Q4.How long is the construction period?

The construction period is around only 1 day for a two-way four-lane road.

Q5.How about the construction damage to the road surface?

We only drill the hole which diameter is 170MM,height is 90MM and then fill up the hole through the specialized glue for ensuring the road can be restored to their original.

Q6.How about the electrical safety?

We adopt 3M waterproof connector for the electrical safety.