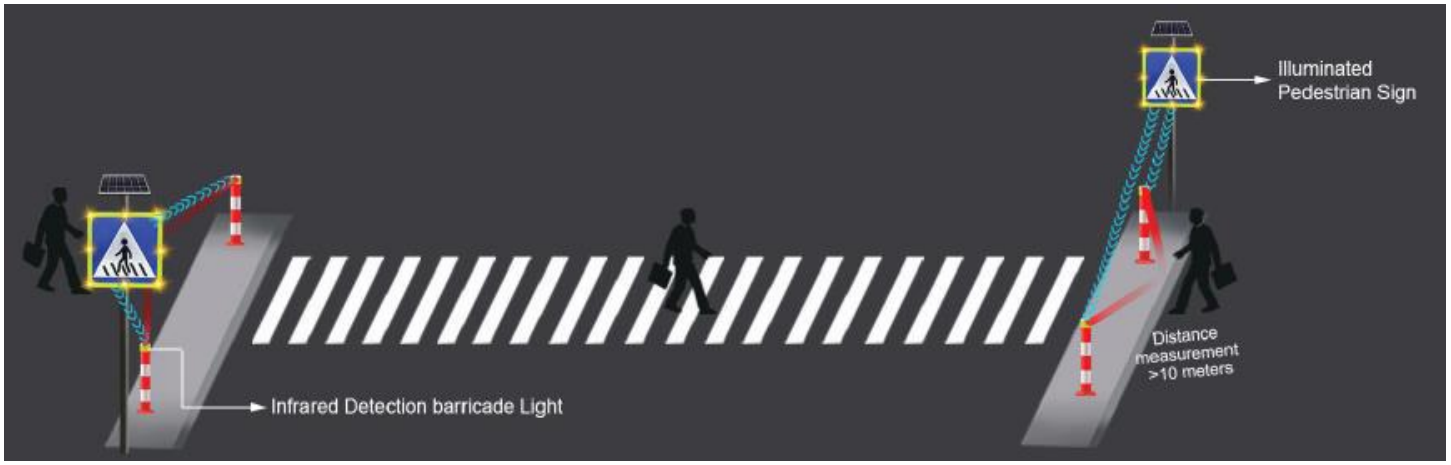
PRODUCT SPECIFICATION



SMART PEDESTRIAN SYSTEM

EVERY LITTLE LIGHT FOR SAFETY

Non-Light Control Area-Intelligent Pedestrian System

Contents

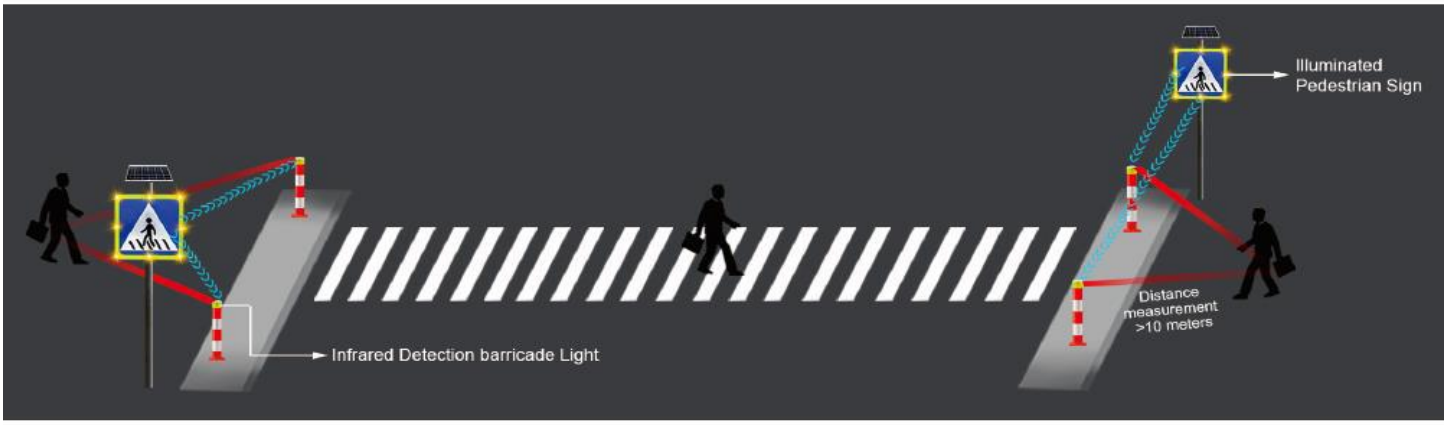
1 Scope

This specification covers the detailed Specification and Performance for the following products listed as below:

2 Products Description

2.1 Background

*The official data showed higher motorist yielding rates at crosswalks where the similar system had been installed in comparison to lower rates for standard warning beacons. The higher yielding rates were sustained even after two years of operation, and no identifiable negative effects were found.



2.2 Brief Description

Install infrared sensor beacon, solar road studs, and edge lit sign pro in the crosswalk area. When pedestrians pass through the detection zone of the infrared sensor beacon, solar road studs, and edge lit sign pro flash, alerting drivers to slow down, and make way for pedestrians.

2.3 Features

2.3.1 The whole system wireless connection, quick installation and easy for maintenance

2.3.2 Accurate detection, real-time activation

2.3.3 Designed for daytime visibility, providing strong warning effects in both day and night

2.3.4 Solar road studs can be optionally equipped

2.3.5 Installing solar road studs: Can enhance the overall warning effect of the system

2.3.6 Not installing solar road studs: No need for road closures, the entire system can be installed in just a few minutes

2.3.7 Can connect to the ELLUMIN Cloud for better solving traffic problems and managing traffic order

2.3.8 Be suitable for pedestrian crosswalk sections in areas where obtaining power is difficult

3 Pedestrian system function

3.1 The control module is for ensuring the system effective operation and upgrading the system operation efficiency.
3.2 It integrates two more functions in one that receive activation signals from activation equipment and send working order to the warning equipment.
3.3 And it can also satisfies the need of customized functionality of the system.

4 Solar Road Stud(Optional)

Once the pre-warning system starts, the LED lamps flashing to alert drivers that pedestrians are about to cross the crosswalk, please slow down and wait.

4.1 Specification

4.1.1 Material: Aluminum

4.1.2 LED Protective Cover Material:Polycarbonate Window

4.1.3 Diameter: Ø6.69" (Ø170 mm)

4.1.4 Height(with basement): 3.87" (98.2 mm)

4.1.5 Protection Level: IP68

4.1.6 Operating Temperature: -4℉ to +176℉(-20°C to +80°C)

4.2 Specification-Optical

4.2.1 LED Qty: 8 LEDs

4.2.2 LED Color: Yellow(Red,Green,Blue,White is available upon request)

4.2.3 LED Brightness Intensity: 25000-30000mcd

4.2.4 LED Configuration: Unidirectional

4.2.5 Visual Distance: 1640 ft(500 m)

4.3 Specification-Electrical

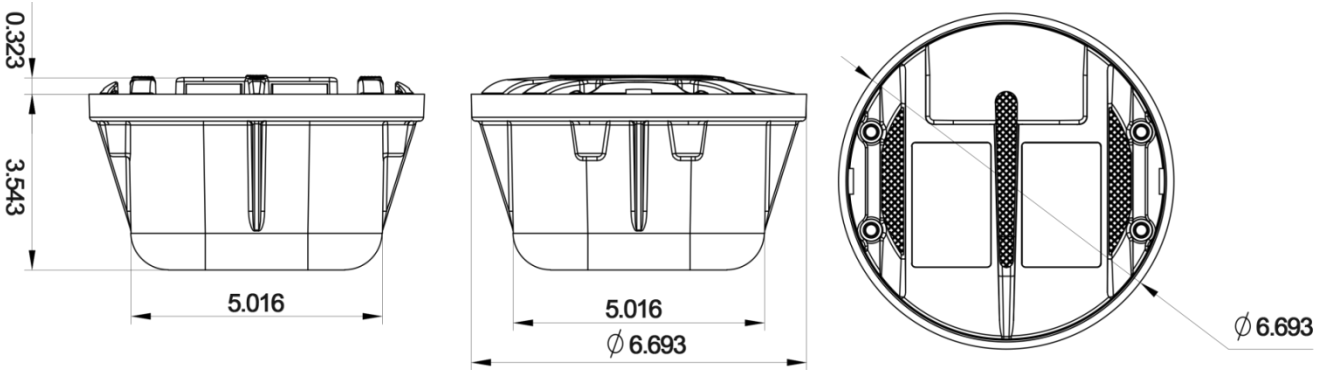
4.3.1 Power Supply: 5V 100mA Solar Module

4.3.2 Power Consumption: 500mw

4.3.3 Current Consumption: 120mA

4.3.4 Lighting Time: 150H after fully charged in flashing mode

4.4 Structure Diagram



Unit: Inch

5 Infrared Sensor Beacon(optional)

5.1 Specification

When the pedestrians pass through the detection zone of the barricade lights, the pre-warning system starts.
Once the pre-warning system starts, entering into a flashing mode, alerting drivers that pedestrians will cross the crosswalk, please slow down and yield.

5.1.1 Material: PC+ diamond grade reflective film

5.1.2 Product size: diameter 126mm, height 113mm

5.1.3 Operating Temperature: -20℃-+70℃

5.1.4 Detection distance: outdoor more than 10m

5.1.5 Trigger mode: broken wire alarm

5.1.6 Induction element: infrared thermal sensor

5.2 Specification-Electrical

5.2.1 Battery parameters: 3.7V 2000mAh lithium battery

5.2.2 Maximum power consumption: 4W

5.2.3 Standby power consumption: 1MW

5.2.4 Average working current: about 100mA

5.2.5 Power supply: 5V 150mA solar module

6 TPU Warning Post(optional)

Be used with the Infrared Detection barricade Lights.

6.1 Specification

6.1.1 Product size: 20*10*80CM

6.1.2 Product material: new TPU high-performance material +3M flexible super reflective film

6.1.3 Use GB/T 18833 Type IV flexible reflective film

6.1.4 Add reflector design to the base

6.1.5 12CM X 80CM TPU Flexible Post optional, single net weight 3.2KG

6.1.6 Flexible, including 2pcs 3M white reflective film, 4pcs holes for screws installation

7 LED Pedestrian Sign(optional)

Once the pre-warning system starts, the LEDs on the sign flashing to alert drivers that pedestrians are about to cross the crosswalk; please slow down and wait.

7.1 Specification

7.1.1 Product material: aluminum plate + domestic high-strength reflective film + optical lens

7.1.2 Product surface material thickness: 2mm

7.1.3 Waterproof grade: IP65

7.1.4 Working environment temperature: -20℃~+60℃

7.1.5 LED lamp bead color: yellow (chroma index meets GB/T 23828 requirements)

7.1.6 LED lamp bead life: ≥100000h

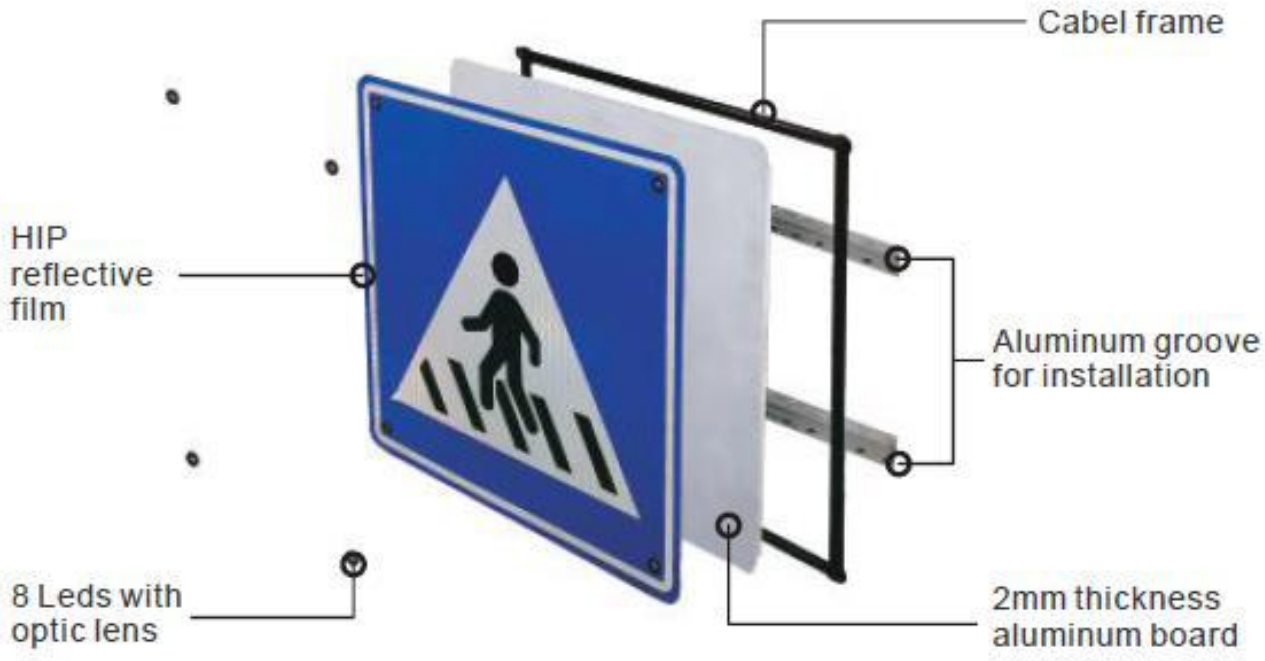
10.1.7 Visual recognition distance: static visual recognition distance > 250m; Dynamic viewing distance > 210m

7.1.8 LED brightness: 80cd/ piece

7.1.9 Flashing frequency: 30±5 times/minute (customizable)

7.1.10 Dimension:80x80cm

7.1.11 8pcs of 1W leds around the edge



8 Solar Set Option 1

8.1 Specification

12.1.1 Material: Aluminum alloy

12.1.2 Operating Temperature: -4℉ to +158℉(-20°C to +70°C)

12.1.3 Protection Level: IP65

12.1.4 Control Box(Double RRFB in one pole)
MUTCD Standard Flash pattern+Brightness
40W Solar Panel

12.1.5 24Ah lithium-ion batteries

9 Solar Set Option 2

9.1 Specification

13.1.1 Material: Aluminum alloy

13.1.2 Operating Temperature: -4℉ to +158℉(-20°C to +70°C)

13.1.3 Protection Level: IP65

13.1.4 12AH Lithium Battery

13.1.5 20W Solar Panel

10 Application

Suitable for level crossings, pedestrian crossings, non-isolated terminals, etc.

11 Auxiliary System - ELLUMIN Cloud(optional)

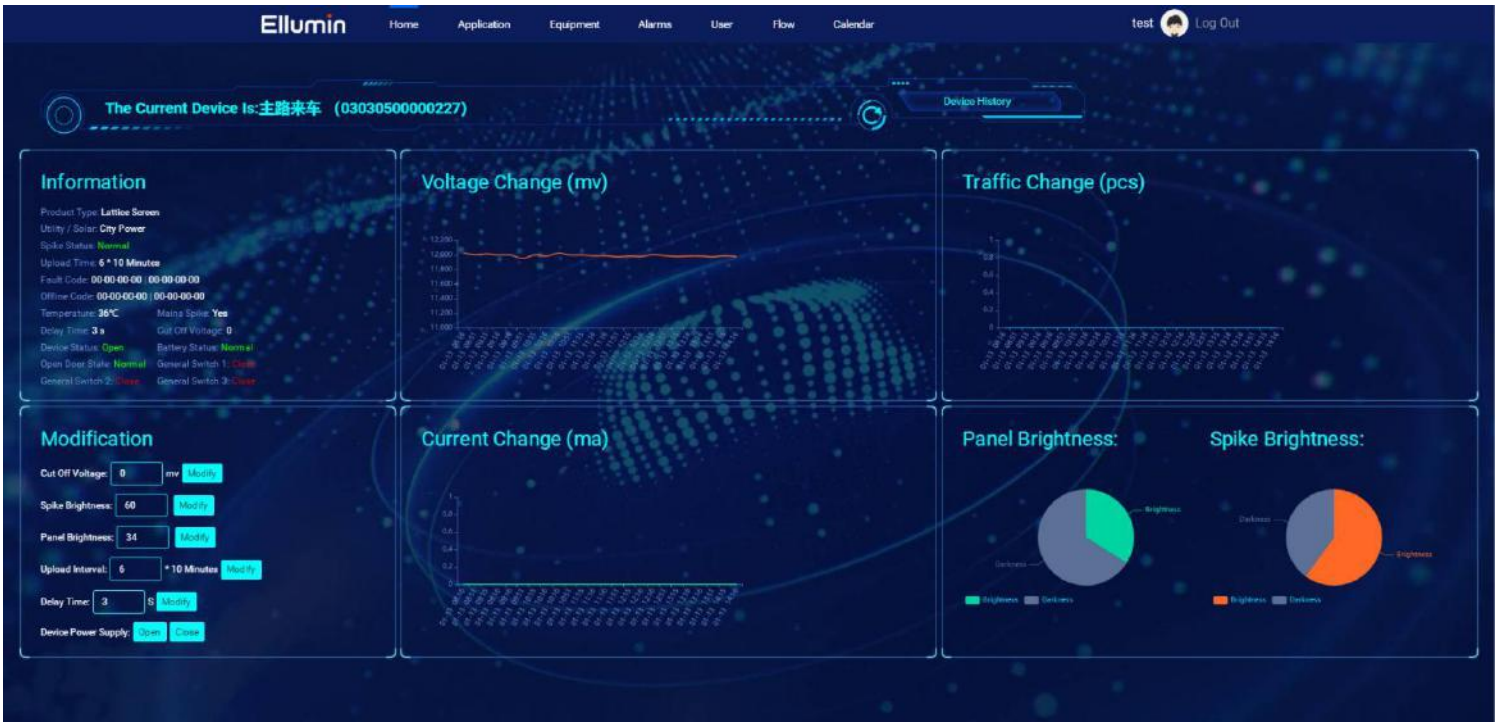
11.1 Description of ELLUMIN Cloud

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.

11.2 Function

11.2.1 Data Reporting

-It can generate professional data reports by capturing, filtering, summarizing and analyzing the data of the day.
-Provide strong data support by historical data exported to EXCEL in chronological order.

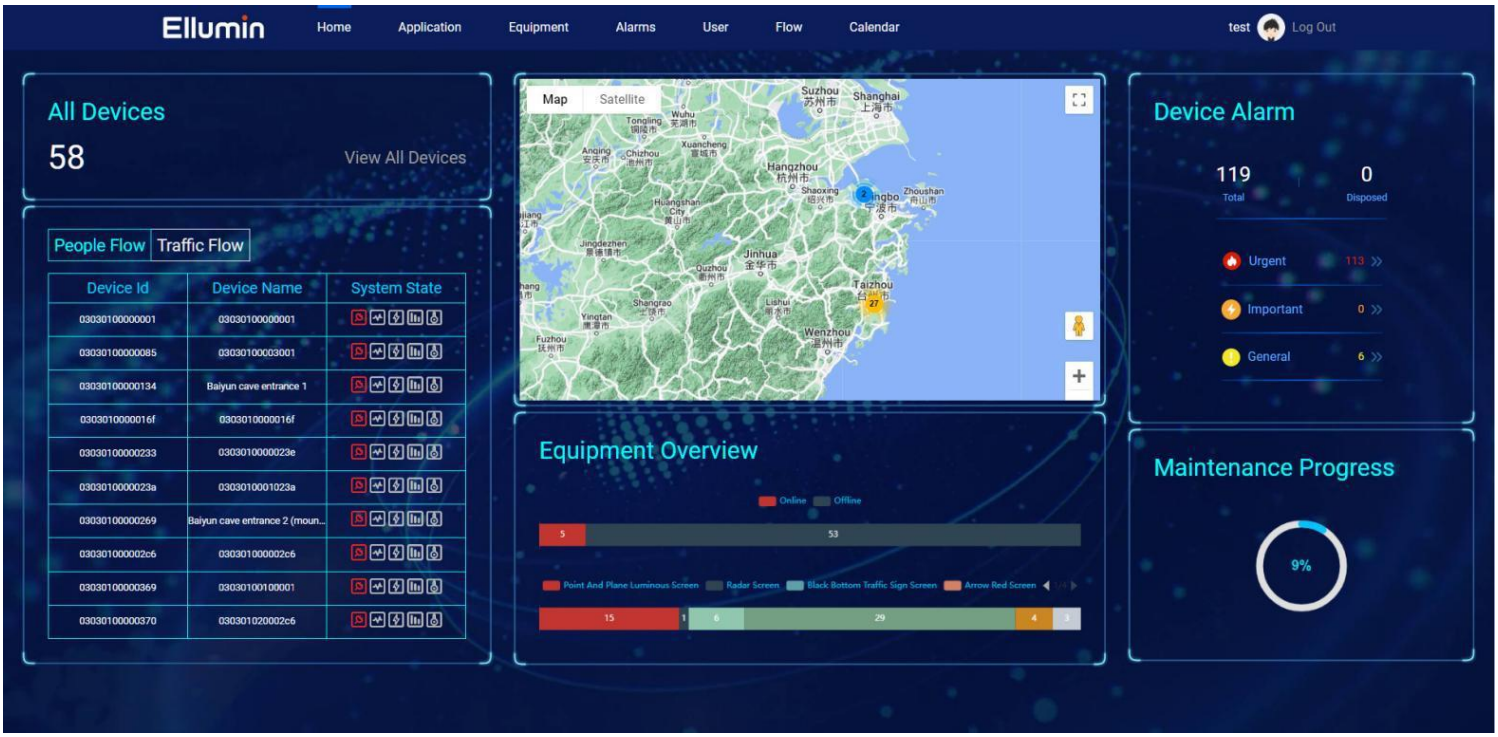


11.2.2 Monitoring Device

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

11.2.3 Online Control Device

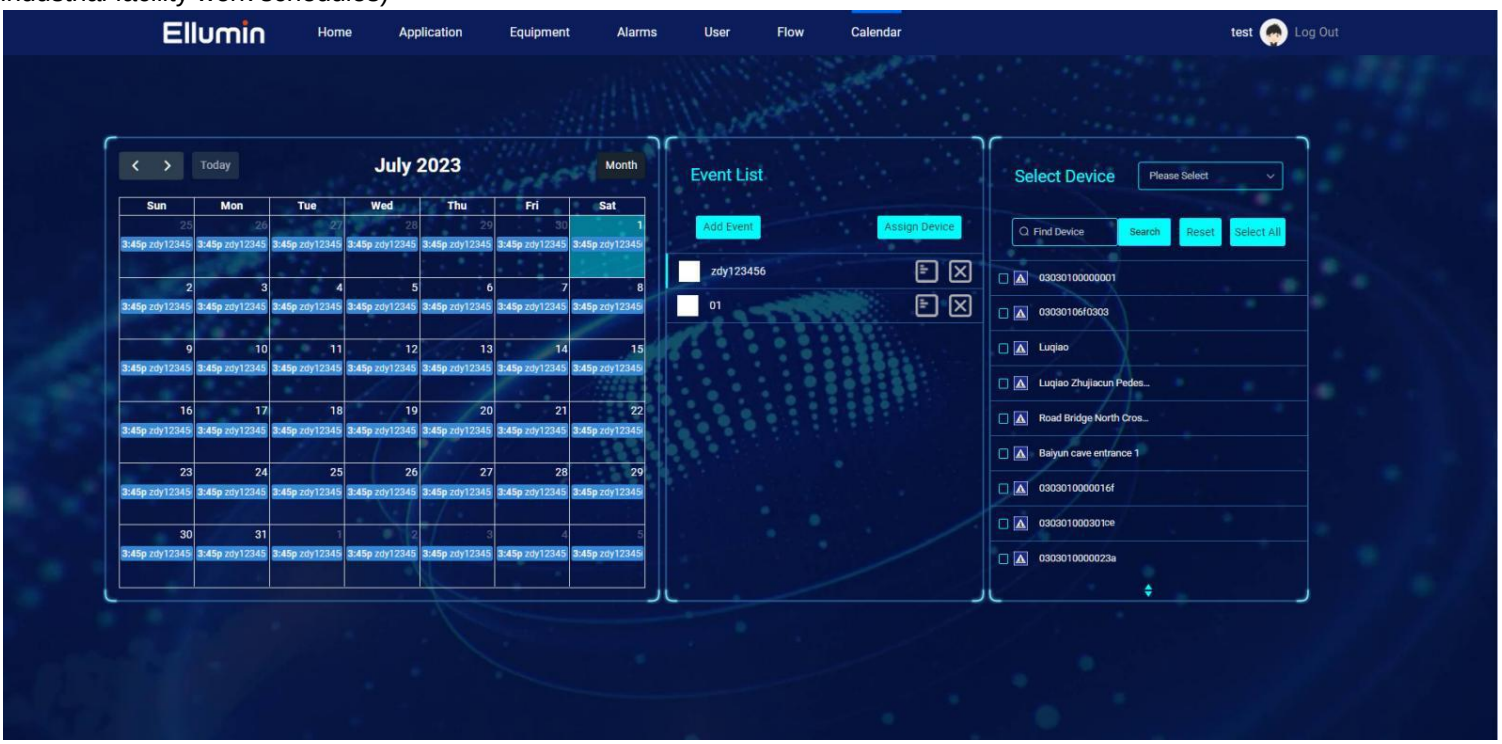
Remotely change the operating status of the device online.



11.2.4 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)



11.2.5 Emergency Notification

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

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