HANGIL HC Co., Ltd.
Traffic System Specialized Enterprise

Smarter guidance with
LED animations

Smart Pedestrian Guiding System

Smart Embedded In-Ground Pedestrian Signal Light

HGHC-24DP1



- Energy Efficient
- Integrated Management Service
- Animated Visual Information
- Improved Visibility
- Strong Durability
- Optimized Installation

The smart embedded in-ground pedestrian signal light is a smart pedestrian guiding system that goes beyond a simple auxiliary signals. In response to the 'Smombie (Smartphone Zombie)' phenomenon, it provides various animated effects, such as remaining time display, direction to cross, visual warnings, etc., and improves overall visibility and pedestrian safety.
The IoT-network monitoring system allows real-time data collection, individual LED adjustments, enables energy-saving settings, and improves maintenance efficiency. The smart embedded in-ground pedestrian signal light is a next-generation component connected to transportation infrastructures optimized for smart city implementation.



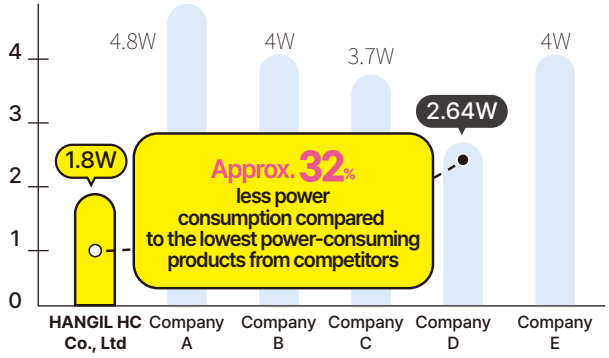
- Public Procurement Service Registration (MAS)
- Certificate of Traffic Signal Controller Functional Inspection
- Certificate of Conformity for Broadcasting and Communication Equipment
- Approval of the National Police Agency Standard Guidelines for Traffic Safety Facilities

Product Competitiveness

Energy Efficient

Maximize energy efficiency with the lowest power consumption in the industry

HANGIL HC's embedded in-ground pedestrian signal light boasts the lowest power consumption in the industry, consuming approximately 32% less power than the lowest power-consuming products from competitors.



Source: Korea ON-Line E-Procurement Market by Public Procurement Service

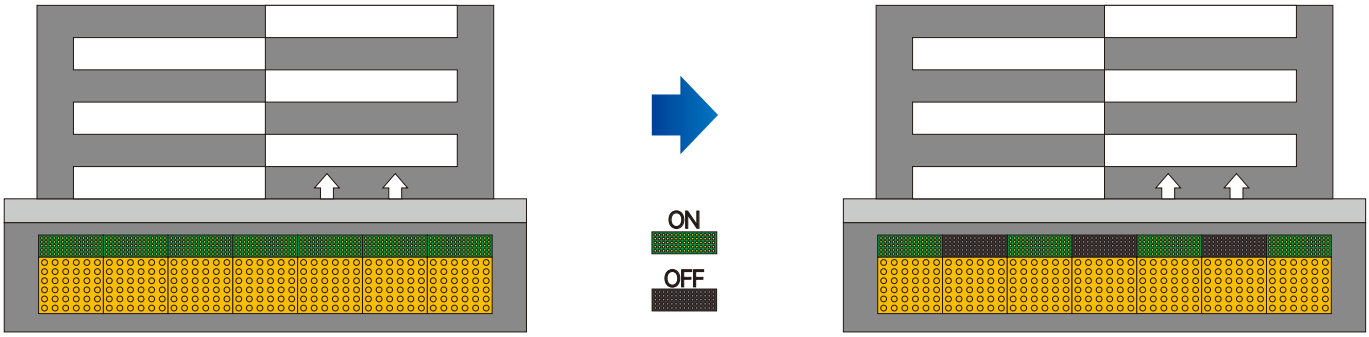
Save energy consumption by automatically adjusting day nighttime brightness

Reduce unnecessary power consumption while maintaining visibility by automatically adjusting brightness accordingly for day/nighttime using a photoresistor.



Save energy and maintain visibility by varying the lighting ON/OFF pattern for a set timeframe

Allows alternating the odd and even lighting patterns for a set timeframe by client request, for further energy saving.
You can also reduce power consumption while maintaining visibility, this by selectively turning on the display units individually rather than turning on all at once.



Integrated Management System (IMS)

Detection of auxiliary device failure

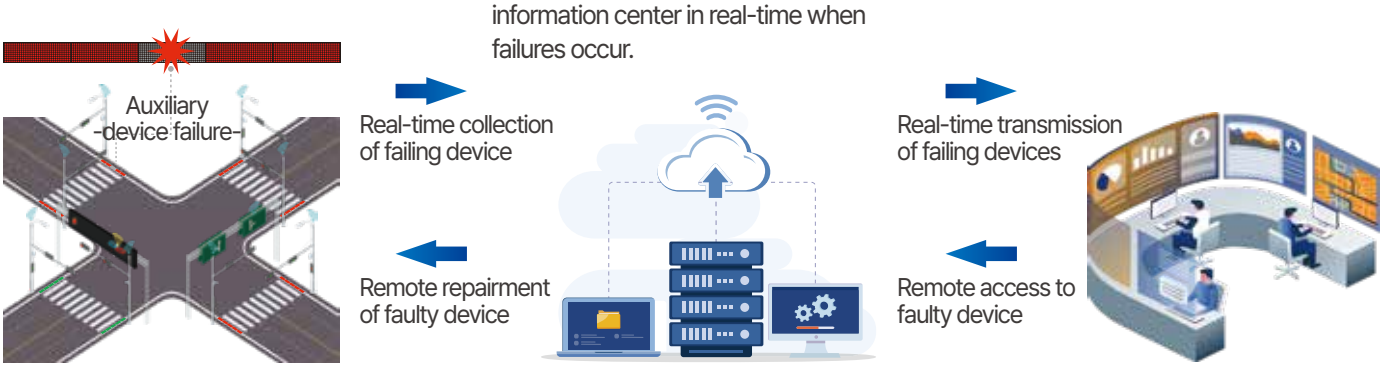
Monitor the operating status of traffic safety facilities in real-time via an integrated gateway to collect relevant information when failures occur.

Collection transmission via integrated gateway

Monitor the operating status of each module of all traffic safety facilities at the subject intersection to transmit the collected information to the traffic information center in real-time when failures occur.

Traffic Information Center - Remote Control Access

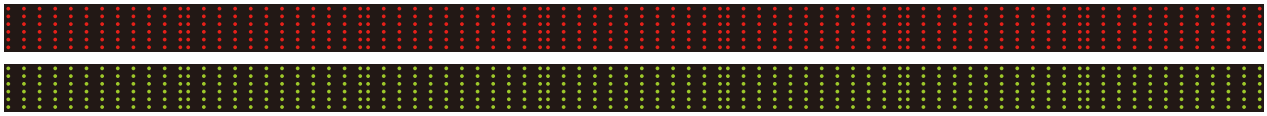
Remotely control and repair when failures occur by monitoring traffic safety facilities at all intersections in the local government in real-time.



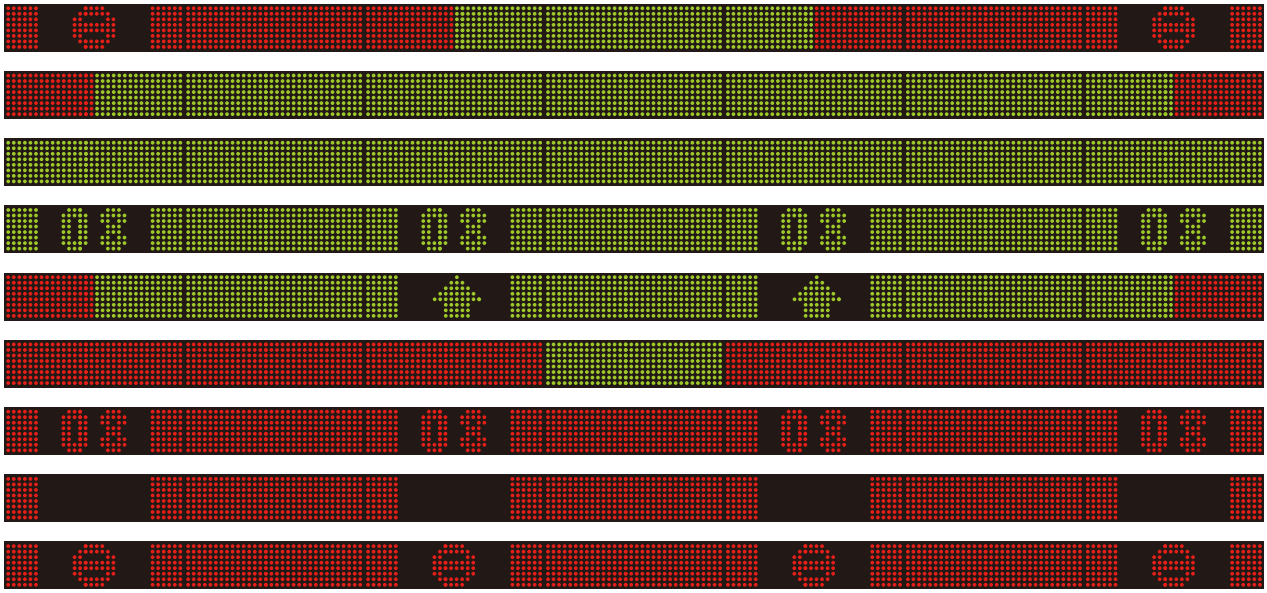
Animated Visual Information

The existing in-ground pedestrian signal lights only flash, which provides neither directional guidance nor a remaining time counter, causing low pedestrian awareness. There are also limitations in unnecessary power consumption and shortening product lifespan due to full LED lighting.
On the contrary, HANGIL HC's smart embedded in-ground pedestrian signal light is a next-generation smart pedestrian guiding system that dramatically improves pedestrians' visibility, safety, and maintenance efficiency through animation-based visual information, dimming function through sequential and partial lighting, and 1.8W ultra-low power design.

Display Pattern of Current Embedded In-Ground Pedestrian Signal Light



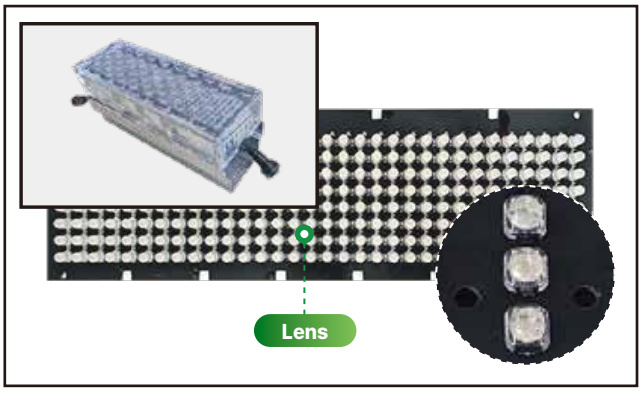
Display Pattern of Smart Embedded In-Ground Pedestrian Signal Light

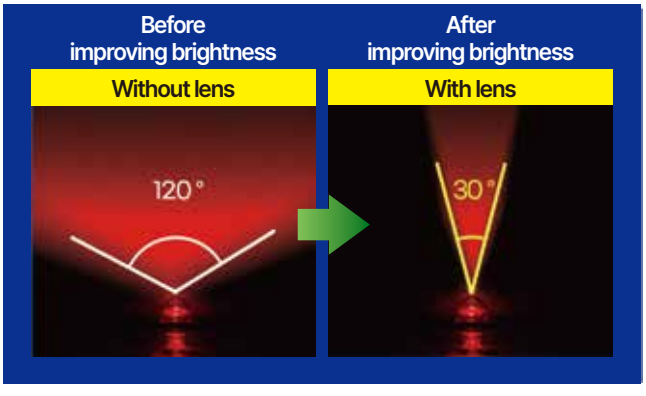


Improved Visibility

Increased brightness by combining SMD LEDs and lenses

It focuses light with a lens over the SMD LED on the display unit, which enables higher brightness with the same power consumption, providing clearer signal information to both pedestrians and drivers by ensuring visibility.

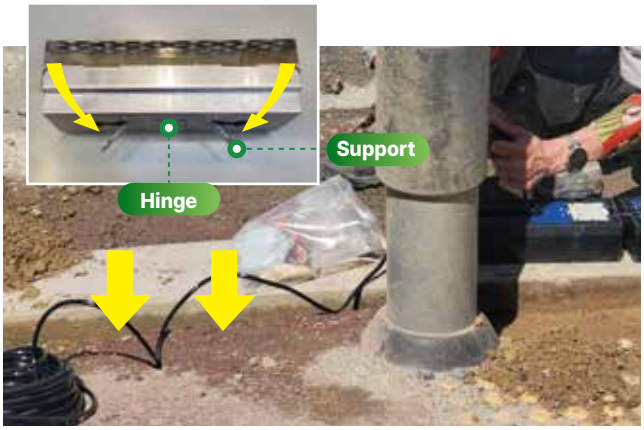




Strong Durability

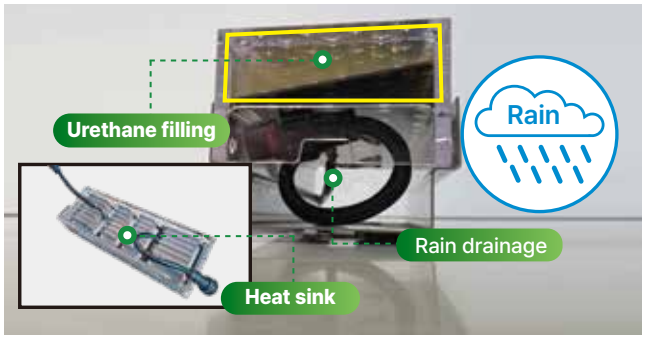
Improved strong durability with stable fixation

Securely fixed to the ground with bracket supports and hinges, it offers excellent durability against external impacts and weather changes.



Improved device durability with waterproof and condensation resistance

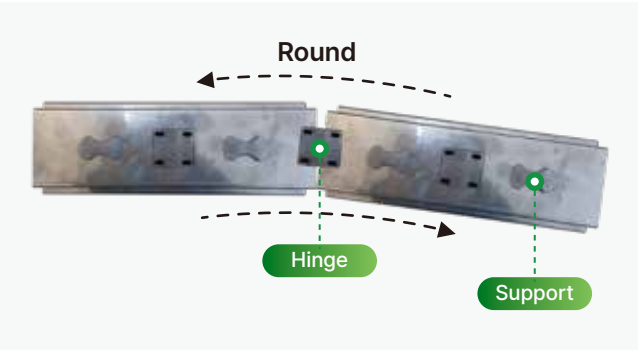
The Urethane-filled display unit delivers a waterproof effect. The space secured under the bracket offers protection against rainwater and condensation, which reduces device failure and prolongs the device's life.

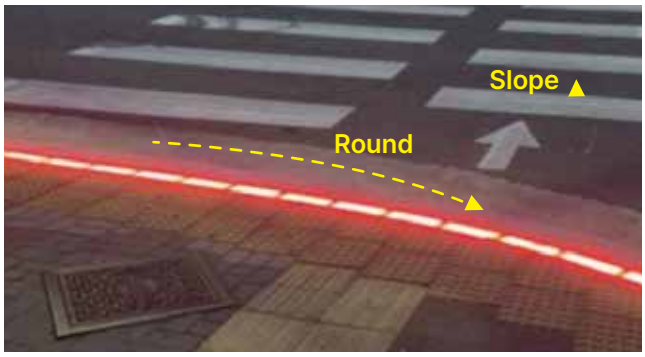


Optimized Installation

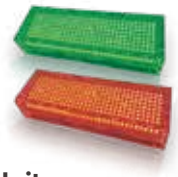
Installation flexibility optimized for various environments

Installation in straight lines as well as smooth curves and slopes is possible by adding additional brackets using hinges, which improve displacement and twisting prevention.





Product Specifications



Display Unit

A device installed behind the curb of a crosswalk that indicates the pedestrian light status as green, flashing green, or red

- **Model** HGHC-24D1
- **Dimensions** 300×100×60mm
- **Power Consumption** 1.8W
- **Input Voltage** 24DCV
- **Weight** 1.45kg



Control Unit

Device that controls day nighttime lighting by collecting pedestrian light status from the traffic signal controller External Device Integrated Interface Board

- **Model** HGHC-24C1
- **Dimensions** 300×250×160mm
- **Input Voltage** 220ACV
- **Weight** 5.1kg



External Device Integrated Interface Board

A device that is connected to a standard traffic signal controller to transmit a pedestrian signal to the control unit in real time

- **Model** HGHC-24EDIB01
- **Dimensions** 233×160mm
- **Weight** 0.20kg

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