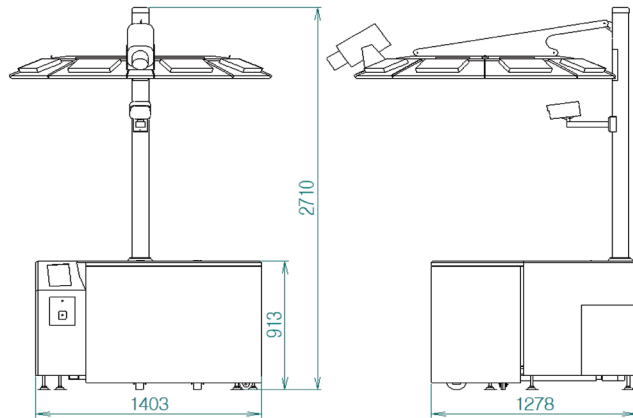


## + Specification



### Collection Box Specifications Table

Model Name	Smart Collection Box		
Product Dimension	Dimension	1403 × 1278 × 2710(mm)	
Capacity	Weight	500(kg)	
	Volume	560(L)	
Power Consumption	Day	0.25(Kw)	
	Night	0.46(Kw)	
Power Generation	PV	0.08(Kw)	

#### Features

- Recognize AI and QR Code
- 10.1 inch Touch Panel
- Automatic Opening and Closing of the Input Slot
- Dual Automatic Opening and Closing of the Waste Collection Section
- Indirect Lighting, Security Lighting, and Gobo Lights Operating at Night
- Equipped with Anti-Pinch Sensors in the Inlet and Collection Section

## + Certification



Eco-friendly Smart Collection Box with Smart-Pole

# Smart(AI) Collection Box



## Eco-friendly Smart Collection Box

A system that uses AI to recognize and collect only certified standard waste bags

### Features



#### AI Technology

- Pay-as-you-go trash bag recognition system using AI
- Recognizes pay-as-you-go trash bags and determines whether to collect or not
- Collects only certified trash bags (Prevents illegal dumping)
- If unrecognized with AI, verifies through QR Code

#### Features of Smart-Pole (S-Pole)

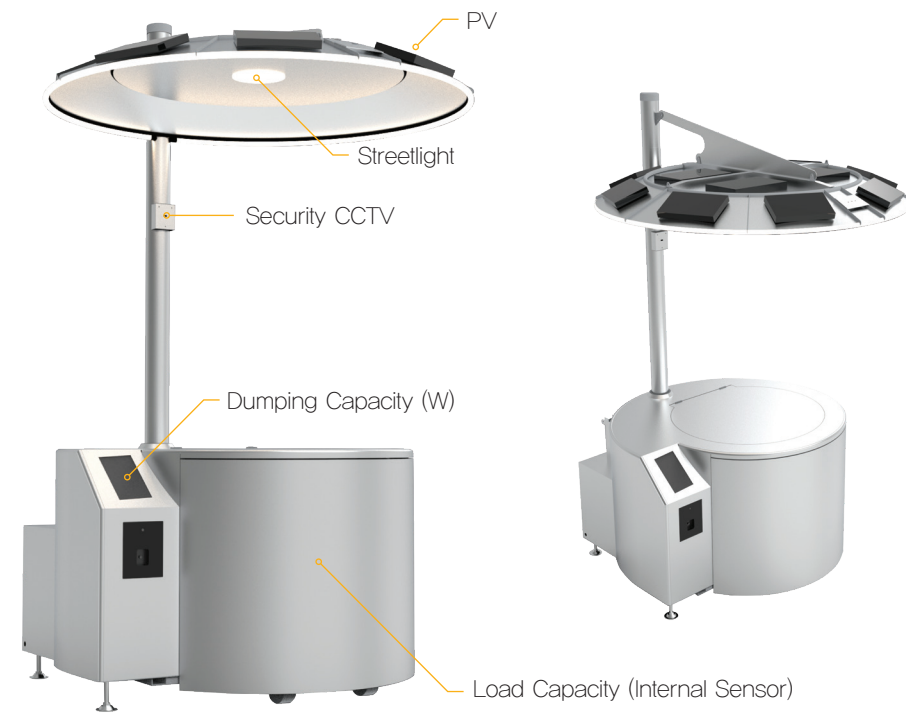
- CCTV for security (Monitors illegal dumping)
- Gobo light (For floor messages)
- Security lighting (Maintains public safety)
- Security bell (For public safety)
- Solar panels (For power supply, energy saving)

#### Environmental Problem Solutions

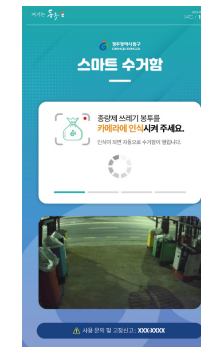
- Contributes to energy saving and carbon neutrality using PV
- Prevents illegal dumping through AI, and S-Pole
- Reduces odor with automatically sealing collection box
- Improves urban aesthetics with environmentally friendly design

#### Convenience & Efficiency

- Hygienic collection with automatic opening and closing
- Provides an internal odor removal system (UV sterilization)
- Accumulation of input quantity management (For rewards)
- Provides information about collection box's location
- Notificate proper operation of the collection box
- Real-time monitoring of load capacity and collection request



### Organization



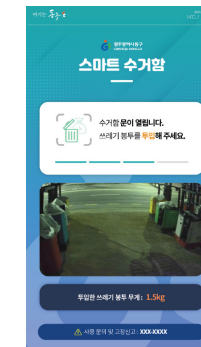
#### Recognize pay-as-you-go trash-bags

AI recognizes the pay-as-you-go trash-bags



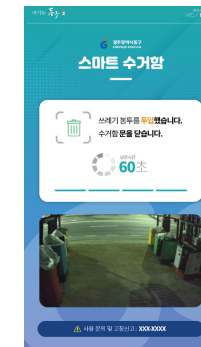
#### Recognize QR Code

When error occurs, AI reads the pay-as-you-go trash-bag's QR code



#### Put the trash-bag inside

Put the pay-as-you-go trash bag inside the collection box



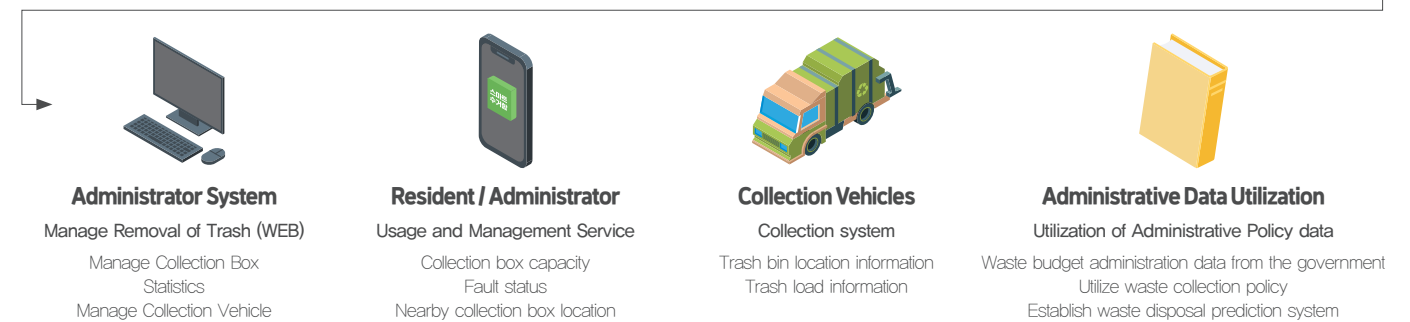
#### Collection box automatically closes

Collection box automatically closes after the put in of trash bag



#### Alarm

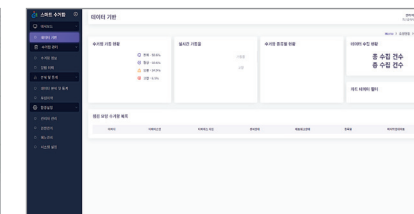
Alarm rings when the collection box is full



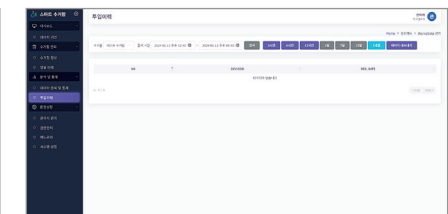
### Integrated Control System



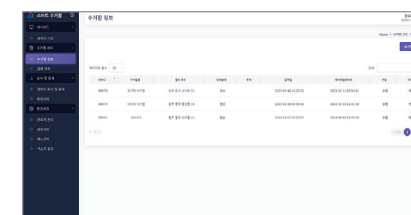
Real-time management of location-based products



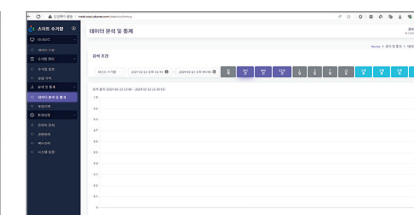
Collection box operation status



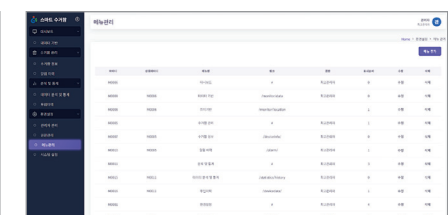
Input history



Collection box information



Data analysis and statistics



Menu

### Expected Effects

- Rapid collecting through real-time monitoring (Warning message when exceeding certain capacity)
- Encouraging dispersed input by providing collection box location and operational status guidance
- Possible to enforce reward policy through input quantity management
- Utilize recycling statistics through constructing pay-as-you-go DB system
- Empowering local residents to solve waste issues on their own