

**innOTECH**

**OUTDOOR INSECT TRAP · DISTRIBUTOR BRIEFING**

# LUMIO KEEPER

Chemical-free flying-insect control for parks, playgrounds and walkways — three wavelengths, one unit

Coverage

**5,382 sq.ft.**

Power draw

**50W**

Ingress rating

**IP55**



**PRODUCT VIDEO**



## 01 · IN THE FIELD

# Installed and operating today



Residential complex walkways



Neighbourhood parks and trails



Daycare and school frontage

Each unit clamps to an existing lighting pole with four stainless bands and taps the pole's own breaker — no foundation work, no separate service feed, no permit for new infrastructure.

02 · TRACK RECORD

8,888 units delivered in Korea

Keeper-series outdoor traps, cumulative to June 2026

8,888

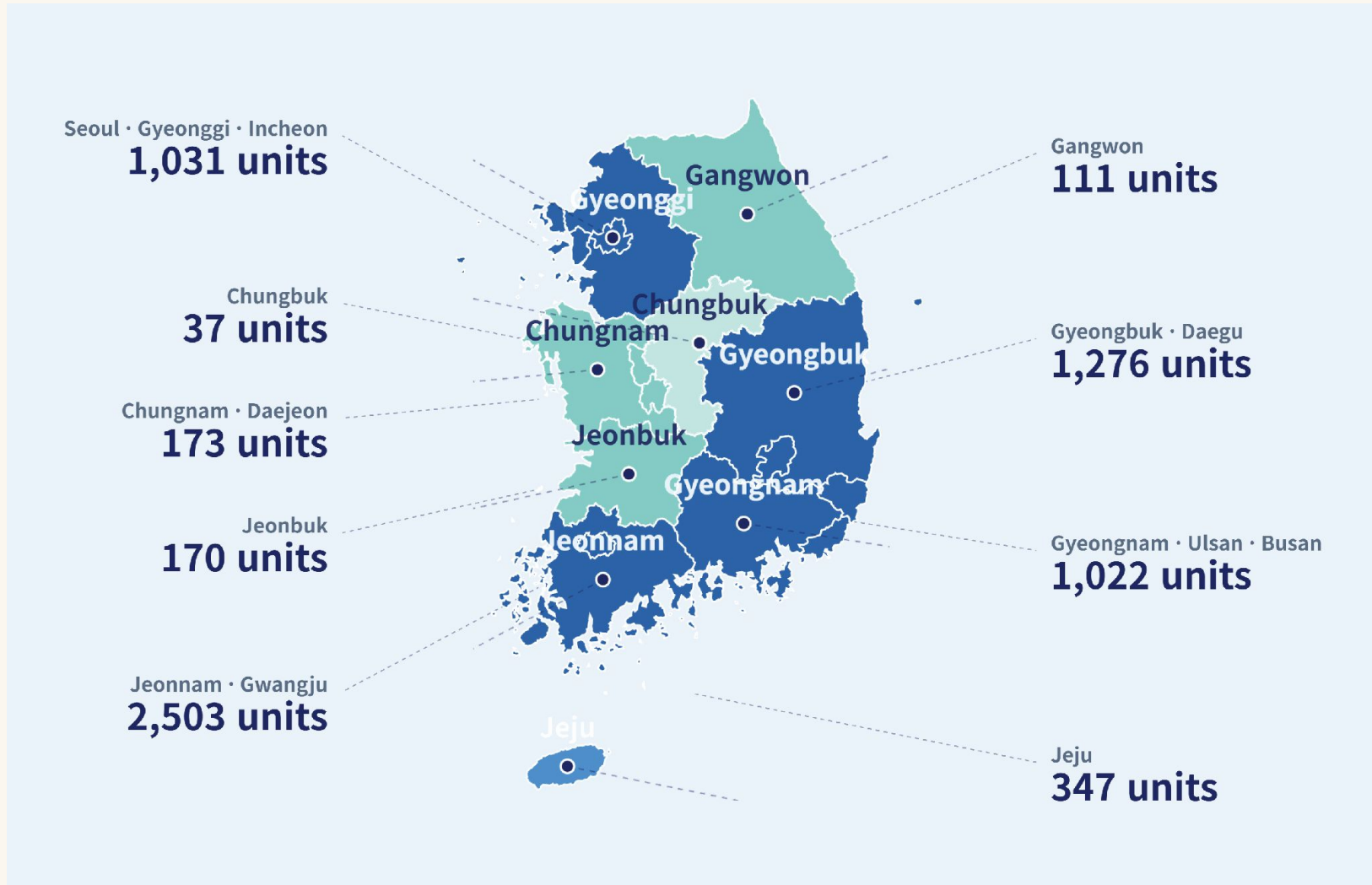
Units shipped

110

Regions and public bodies

By region, highest first

|                    |       |                            |       |
|--------------------|-------|----------------------------|-------|
| Jeonnam · Gwangju  | 2,503 | Jeonbuk                    | 170   |
| Gyeongbuk · Daegu  | 1,276 | Gangwon                    | 111   |
| Seoul · Gyeonggi   | 1,031 | Chungbuk                   | 37    |
| Gyeongnam · Busan  | 1,022 | Pest-control / food plants | 2,068 |
| Jeju               | 347   | Export — HK, Vietnam       | 150   |
| Chungnam · Daejeon | 173   |                            |       |



REFERENCE SEGMENTS

Health centres · parks and island villages · residential estates · water plants · food factories · research institutes.

## 03 · THE SALES CASE

# What your buyer is trying to solve

### **Spraying is restricted**

Playgrounds, daycare frontage and food-service terraces limit or forbid pesticide application. A physical trap leaves no residue and draws no complaints.

### **Fogging is a recurring cost**

Every fogging round is crew time, chemical spend and scheduling. A fixed unit runs unattended on a timer for the whole season.

### **Outdoor kit fails early**

Most outdoor traps are rated IPX4 and fail after a season of rain and dust. IP55 and a stainless body are the difference between one summer and several.

Strongest openings: municipal parks departments, apartment management companies, school and daycare operators, campground and resort grounds teams.

04 · WHY IT CATCHES MORE

# One wavelength reaches half the problem

Insect species respond to different ultraviolet peaks. A single-wavelength trap concentrates its pull on one group and leaves the rest of the mixed population at the site untouched. Mosquito control in particular depends on the 365nm band.

Lumio Keeper emits 365nm and 395nm simultaneously and adds 450nm blue, widening the range of species drawn to the unit.

|       |                                                                       |
|-------|-----------------------------------------------------------------------|
| 365nm | Mosquitoes — Asian tiger, common house, vector and anopheline species |
| 395nm | Moths and other night fliers                                          |
| 450nm | Supplementary pull · visible operation                                |

## 05 · LAMP ARRAY

# Three wavelengths in one housing

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**24**

**365nm UV LEDs**

Mosquito-specific band

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**24**

**395nm UV LEDs**

Broad night-flier band

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**20**

**450nm blue LEDs**

Supplementary pull

Sixty-eight LEDs across three wavelengths share a single serviceable lamp module, replaceable in the field in about a minute.

## 06 · HOW IT WORKS

# Attract → draw in → chop → discharge

### STEP 01

#### Attract

365nm, 395nm and 450nm light draw flying insects to the upper housing.

### STEP 02

#### Draw in

A quiet BLDC fan creates downward airflow and pulls them into the body.

### STEP 03

#### Chop

An internal blade chops the catch so nothing escapes back out.

### STEP 04

#### Discharge

Residue drops out of the bottom outlet — no net, no tray, no collection round.

Because it draws in and chops rather than electrocuting, there is no snapping noise and no debris scatter — which is what makes it acceptable next to housing and seating areas.

07 · COVERAGE

One unit covers 500m<sup>2</sup>

5,382 sq.ft. per unit

Unit mounting height 2.6 m on pole

Control box height 1.7 m

Best-fit sites Parks · playgrounds · walkways

Site the unit on lit pedestrian routes, near seating and play equipment, and along tree lines or water features where insects breed.



08 · RUNNING COST

50W total — half our previous model

Lumio Keeper

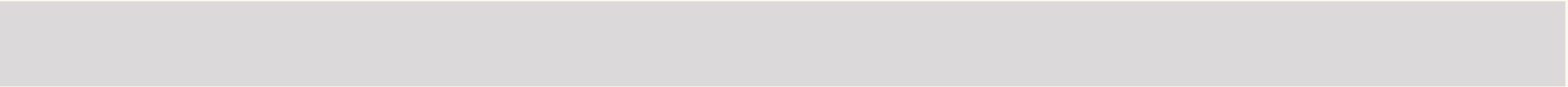
50W



Lamp 37W   Motor 13W

Previous model (Smart Keeper)

100W



Factory default schedule runs about ten hours a night, 1 April 19:00 to 30 October 05:00 — roughly 2,130 operating hours, so 107 kWh per unit per season against 213 kWh.





**LOWER BODY PANEL —  
BRANDING SPACE**

**09 · DURABILITY**

**IP55, built for year-round outdoor duty**

Where most outdoor traps stop at IPX4, Lumio Keeper is rated IP55 with a stainless body and a separately sealed control box — the combination that keeps it running through rain and dust seasons.

**Branding space on the lower body panel**

The blank panel on the lower body can carry your own brand or the end client's logo — supplied printed to your artwork.

Ingress rating  
**IP55**

Body material  
**STS304**

Mounting  
**Outdoor fixed**

Control box  
**Detachable, sealed**

## 10 · POWER

# DC12V architecture, universal input

**01** Stable supply to the lamp and motor

**02** Longer component life than AC-direct designs

**03** Lower shock risk when servicing in the field

Power is taken from the lighting pole's own breaker; the cable enters through an 8 mm gland in the base of the control box.

TYPE

# DC 12V

Input

**AC100–240V**

Output

**DC12V 4.2A**

11 · SERVICE

Install once — no routine maintenance

|                           |                        |
|---------------------------|------------------------|
| Emptying the catch        | Never — auto discharge |
| Lamp replacement          | 1 minute               |
| Motor replacement         | 2 minutes              |
| Lamp · motor · timer life | 3–5 years              |
| Breaker life              | 5+ years               |

The catch is chopped and discharged through the bottom outlet — no net to empty, no tray to clean. After commissioning the unit runs on its annual timer.



12 · SPECIFICATION SHEET

Full specification

|                 |                            |                |                                  |
|-----------------|----------------------------|----------------|----------------------------------|
| Product         | Outdoor insect trap        | Lamp — 365nm   | UV-LED ×24                       |
| Model           | LUMIO KEEPER               | Lamp — 395nm   | UV-LED ×24                       |
| Manufacturer    | INNOTECH Co., Ltd.         | Lamp —         | Blue ×20                         |
| Dimensions      | 280 × 800 × 245 mm         | 450nm Coverage | 500㎡ / 5,382 sq.ft.              |
| Weight          | 9.5 kg incl. control box   | Rated input    | AC100–240V                       |
| Body material   | STS304 stainless           | Output         | DC12V 4.2A                       |
| Installation    | Outdoor fixed · pole-mount | Power draw     | 50W (lamp 37 + motor 13)         |
| Mounting height | Unit 2.6 m · box 1.7 m     | Motor          | BLDC fan, low noise              |
| Ingress rating  | IP55                       | Capture method | Suction · cut · bottom discharge |
| Control box     | Detachable, sealed         | Timer          | Annual · sunset–sunrise          |

Lamp · motor · timer life

3–5 years

Breaker life

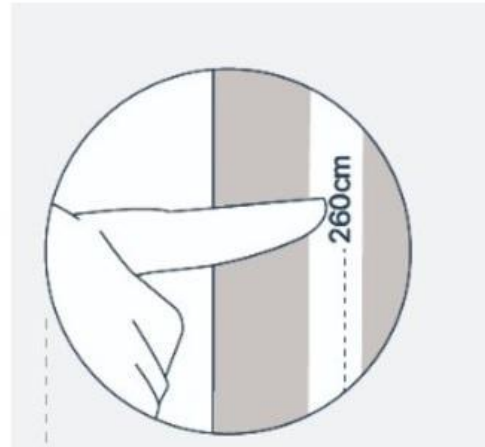
5+ years

Field service

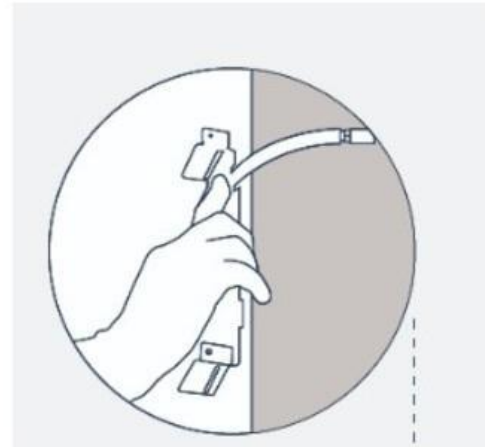
Lamp 1 min · motor 2 min

## 13 · INSTALLATION

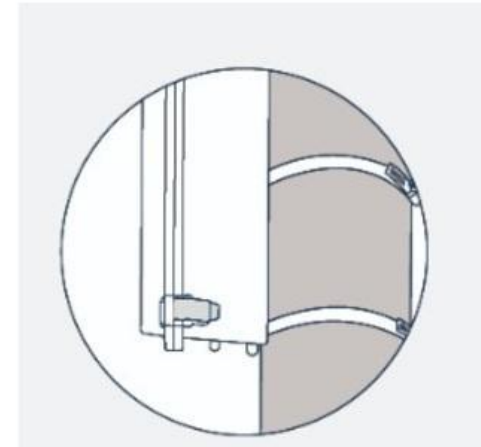
### Six steps on an existing pole



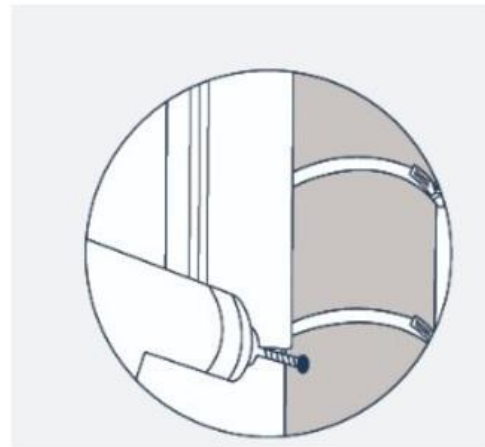
01



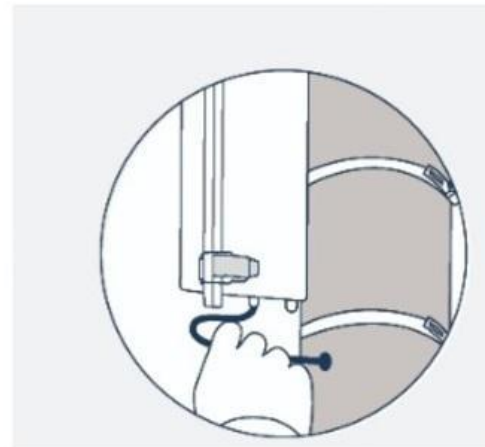
02



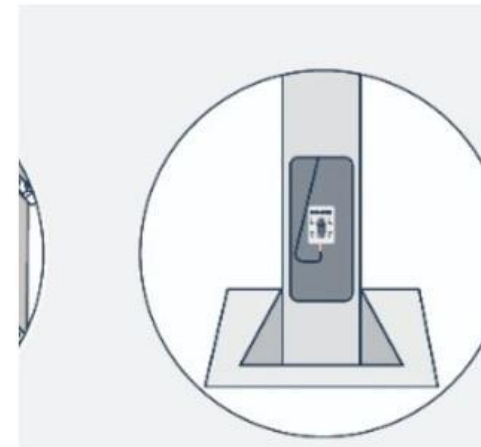
03



04



05



06

- 01 Fix the bracket to the pole at **2.6 m** with a stainless band.
- 02 Hang the main unit on the bracket and tighten it down.
- 03 Band the control box to the pole at **1.7 m**.
- 04 Route the cable into the sealed **8 mm** gland in the box base.
- 05 Take power from the lighting pole's own breaker.
- 06 Set the timer schedule and test-run the unit.

No groundworks and no separate supply — the install reuses the existing pole.

14 · DRAWINGS & CONTENTS

Drawings and box contents

|                       |                                        |
|-----------------------|----------------------------------------|
| Product · model       | Outdoor insect trap · LUMIO KEEPER     |
| Dimensions            | 280 × 800 × 245 mm                     |
| Weight                | 9.5 kg incl. control box               |
| Material · mounting   | STS304 · outdoor fixed                 |
| Rated input · output  | AC100–240V · DC12V 4.2A (50W)          |
| Lamp · ingress rating | UV-LED module · IP55                   |
| Timer                 | Annual schedule · sunset–sunrise modes |

Bracket bolts ×4 are an option item. Band size is selected to the pole diameter on site.

Dimensions (mm)

Width  
245 mm (9.65 in)

Height  
800 mm (31.5 in)

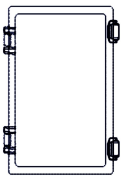
Depth  
280 mm (11.0 in)



Box contents



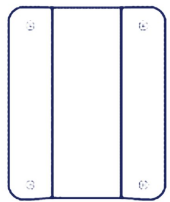
Main unit



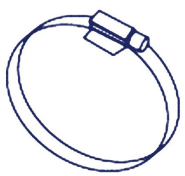
Control box



Manual



Bracket



Bands ×4



Bolts ×4 (option)



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## Distribution enquiries

Tell us the territory and the site types you serve. We will come back with unit counts per site area, pricing tiers and lead times.

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