

# Escalator Handrail Sanitization System

## Automatic disinfection & cleaning of escalator handrails

3-Step effective cleanup to remove 99.99% germs

### Overview

- 3-step cleaning
- Ecological and non-toxic disinfectant
- Fits all escalator types
- Suitable for escalators & travelators
- Unobtrusive, fits flush at the head of the escalator
- 7" digital display screen for promotions/cleaning status
- Central control
- Extends life of handrail by optimal cleaning system



### How the WeClean Escalator Handrail Cleaning System works

#### 3-step cleaning

1. An eco-friendly, natural disinfectant kills 99.99% germs on the handrail
2. A 3-tier lint-free roller wipes off dust, dirt and disinfectant residue
3. Philips UV lamp gets rid of bacteria & ensure the hand rail is completely dry.

#### The Disinfectant

- Safe and eco-friendly, approved as a food disinfectant
- Removes 99.99% of various bacteria and viruses
- Easy to replace liquid by simple structure design
- Key role in the structure optimized for the moving escalator handrail

#### 3-tier Cleaning roller

- Completely removes foreign substances in triple action structure
- No scratch on handrail
- Fully automatic design by interlocking motion sensor

#### UV-C LED

- Proven Philips surface sterilization
- UV-C LED drying of the rail to completely dry the rail
- Powerful UV 235.7nm UV
- Secondary sterilization of various bacteria and viruses by supporting the sterilization liquid

## 7-inch LCD Monitor

Real-time notice / public information transmission system

Video, image, audio transmission

Information transmission on high-definition screen

## Retro-fitted

Easy to mount/remove over existing escalators.

Up / down / left / right adjustment

Suitable for all escalator brands

Easy maintenance

Adjustable bracket

## Power Supply

Power supply type: DC Adaptor 12V 2A

## Efficient management

Automatic 24 hour cleaning and sterilization control

Real-time monitoring and control with IoT (Internet of Things) technology

## Optional features:

People counter – Measures the frequency of use via a motion sensor

Fine dust sensor – PM 2.5 and PM 10

Auto motion sensor

Temperature & humidity sensor

Emergency Switch (E/C) Connect

Automatic Driving (IR) Sensor – E/C Connect

## Applications:

Hospitals, Shopping Malls, Airports, Metro & train stations, hotels, large buildings, office towers,



## Technical Specifications

Product Name:	WeClean- E (Power supply Type)
Installation:	DC 12V power connection Fixing upper / lower bracket
Operation:	Disinfecting liquid spray & washing roller only when the hand rail is operated
Electric power source:	DC Adaptor 12V 2A
UV LED:	UV-C 275nm
Display:	7inch LCD panel 800 • 480
Speaker:	SPEAKER OUT(2.0W)
Wifi & USB:	WLAN 802.11 b/g/n 2.4GHz / 5GHz & USB2.0
Product Size:	186 * 510 * 862mm
Weight:	18Kg
Main board:	ARM Cortex TM-AI Dual- Core / DDR3 1 G
Storage:	eMMC(4.5) 4GByte I MICRO SD CARD 16GByte
OS:	ANDROID 4.2.2 (Jelly Bean)
Management Program:	SWIT-MSC 1.0

## Optional items:

Mover counter sensor:	940nm laser VCSEL
Fine dust sensor (PM sensor):	Laser particle sensor module_PM2.5, PM10
Temperature & Humidity sensor:	Heating flow type_- 40°C-125°C , RH 0-100%

## Consumables:

Cleaning Roller:	
	Sponge R/L : 1 ea
	Cleaning R/L: 2ea
Sterilization Liquid:	
	Hydrogen peroxide (0.5%)
	Sodium benzoate (1.0%)
	Purified water (98.5%)

Made in Korea



Cleaning Roller



Disinfectant Liquid



UV-C LED

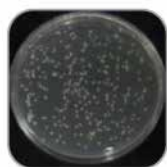
## IoT Control Solution



Can check the status of consumables & the replacement of consumables. A/S application, & processing details through the smartphone application

## The Results

Bacterial detection result and cleaning roller condition before and after installation



Bacterial detection count : 273



Bacterial detection count : 0



Roller before cleaning



Roller after one month



Mop that wiped handles before installation



Mop that wiped handles after installation



Handle before cleaning



Handle after cleaning

## Beyond Cleaning



Promotion & Marketing via 7" Screen  
Communicate to your visitors that you are contributing to public health  
Communicate promotions & offers