UNIONLIGHT
Emergency Light & System

" UNIONLIGHT will open a safe world for you"

- English Version -

UNIONLIGHT
Emergency Light & System

Creation of new values that illuminate the world

UNIONLIGHT Co., Ltd. was established as Union Electronics Co., Ltd. on March 21, 1987 as a total manufacturer of 50 kinds of Emergency Lighting and Rechargeable Lamps in Korea. In 2001, we changed the company name to UNIONLIGHT Co., Ltd.

We were selected as INNO-BIZ by the Small and Medium Business Administration, received the Q-Mark from KTC. We implement a complete quality assurance system such as CE, and ISO 9001 (international standard). We have proved the product performance and functions through supplying to Korean and overseas industrial companies, public institutions, military and fire fighting area.

Our products were recognized for the role and functions as an excellent safety equipment for power outages caused by fire-fighting and disasters. We acquired "THE KOREA SAFETY AWARD", the highest honor of the fire safety manufacturers in 2004, 2007, 2012 and 2014, as the first 4-times prize awardee in the industry. We won the Presidential prize at the Korea Electrical Culture Grand Prize. In addition, by establishing a company-affiliated research institute in 2012, we had an UP-Grade environment for R & D and new product development. In 2014, we were selected as an excellent company brand of HI SEOUL.

UNIONLIGHT Co., Ltd. has been developing since the foundation of the company through the history of 'Harmony, Creation, and Co-Prosperity' and the sense of mission of the national economy and contribution to human society.

EMI environment corresponding technology

Multipurpose functional design technology

High efficiency lighting design technology

Green eco-friendly design technology

CONTENTS

INNOBIZ 기술혁신형중소기업   Hi Seoul   Q   ISO   KFI   KC   CE

HISTORY

Best Partner of Safety Light, UNION LIGHT

2010~2017

2017. 06. Participated in NFPA Conference & Expo 2017 in Boston, USA
Participated in FIREX in London, UK

05. Participated in 2017 International Electric Power Exhibition (COEX)

04. Awarded 'Product Safety Prize of the Month'

03. Awarded the most beloved brand in Korea

01. Participated in Intersec Exhibition in Dubai
Established branches in United Kingdom (London), Egypt (Cairo), Laos(Vientiane), UAE (Dubai)

2016. 12. Acquired family friendly company certificate
Awarded silver prize in the 2016 Patent Management Awards

10. Awarded the 15th Korea Safety Grand Prize

09. Participated in Secutech 2016 in Vietnam

06. Participated NFPA Conference & Expo2016 in Las Vegas, USA
Received the Presidential Commendation of the 19th Korea Electricity Culture Grand Prize

05. Participated in 2016 International Electric Power Exhibition (COEX)

03. Designated "Clean Workplace"

01. 2016 Korea Satisfaction Consumer Index
(Han kyung business News Paper)

2015. 12. EWP Achieving industrial innovation movement 3.0 (EWP)
Designated as a Promising Export Firm (SBA)

2015. 10. Participated in CHINA FIRE 2015 Exhibitions
Participated in KOMAF 2015 Exhibitions (KINTEX)

09. New York office established (KOTRA)
Participated in IFSEC 2015 in Malaysia Exhibitions

06. Participated in 2015 NFPA Conference & Expo in Chicago

05. Participated in Global Electric Power Tech 2014 at Coex
Designated as Recognized as "High-growth companies" product Korea Standards Association

2014. 06. Participated in 2014 NFPA Conference & Expo in Las Vegas

05. Participated in Global Electric Power Tech 2014 at Coex

04. Designated as an enterprise to reinforce export capacity by SMBA in 2014

01. Designated as a Hi-Seoul Brand Company

2013. 11. Part of 2013 Oversea Market Pioneer for China Firefighting Industry
Participated in Fire & Security Shanghai 2013 in Shanghai

10. Participated in KOMAF 2013 at KINTEX

05. Chosen for investment by the Japan External Trade Organization (JETRO)
Chosen as a mutual growth consultative body by Korea East-West Power

01. Participated in the 5th LED/OLED Lighting Technology Expo in Tokyo

2012. 11. The 11th Korea Safety Grand Prize (Superior Product category)

2011. 09. Commendation on Product Safety Day
[Ministry of Knowledge Economy Agency for Technology and Standards]

2000~2009

2009. 12. AVING 'VIP ASIA 2009 Product of the Year' Award
(Unibeam near infrared ray sitz bath)

01. Approval of medical device GMP (Production and quality management standards of pharmaceuticals) by KFDA

2008. 07. Selected as INNOBIZ technology innovation company

06. VIP ASIA Award (Emergency lighting category)

2007. 11. Grand Prize in Korea Safety (Superior product division)

05. Grand Prize in Korea Electric Culture (Prime Minister Award)

04. Academy-Industry Agreement with Seoul National University of Science and Technology

2006. 12. 3rd Prize in 2006 Korea Invention Patent Competition

11. Won the Ministry of Commerce, Industry and Energy Award at the 22nd KyungHyang Electricity & Energy Award

2005. 11. Quality Management System certification of ISO9001 (ITQA)

09. Certified as High Efficiency Energy Apparatus by Korean Energy Management Corp.

06. Selected as Superior Product, first in the Emergency Light industry(GQ) by SMBA

2004. 12. The 3rd Korea Safety Grand Prize (Superior Product category)

05. Won the Ministry of Commerce, Industry and Energy Award at the 7th Korea Electrical Culture Awards

2002. 06. Selected as one of 100 Excellent Patented Product Grand Prize.
(Korean Intellectual Property Office / Hankook Ilbo)

03. Recognized as "The Best" product Korea Standards Association

2001. 10. Appointed as Promising Small and Medium Business (SMBA)

06. Obtained UL mark, the US safety standard

2000. 03. Appointment as venture company (Second time): (SMBA)

1987~1999

1999. 05. Won the Silver Award at the International Exhibition of Inventions of Geneva in Switzerland

03. Designated as Promising Export Firm by SMAB (No.1999-0246)

1998. 12. Awarded the Director of the Patent and Trademark Office Award at KINPEX (No.1359)

05. First in the portable lamp industry to receive the Good Quality(GQ) title

04. Registered as a supplier for Ministry of National Defense

03. Made an exhibit at Exhibition of Korea Government Procurement

1997. 11. Made an exhibit at Daejeon TAMAS '95 (KOTRA)

1996. 10. Made an exhibit at Seoul Air Show (SMBA)

1994. 05. Made an exhibit at Korea Expo in Chicago (selected by Seoul Metropolitan)

1993. 02. Designated as a procurement enterprise for KOICA

1992. 05. Firefighting equipment, chosen by the Seoul Metropolitan

03. Registered as a government procurement enterprise

1991. 11. Merchandising at Ukraine (KIEV, DONESK, YALTA) for 10 years

04. Made an exhibit in UKREXOP 90', KIEV – the only Korean product

1987. 03. Foundation of Union Light

Light R&D CENTER

DESIGN TEAM
• UTENSIL DESIGN
• NEW PRODUCT DESIGN

DESIGN OF PRODUCT
• CIRCUIT DESIGN
• MANUFACTURING TECHNIQUE
• MAKE NEW PRODUCT
• PRODUCT TEST

TECHNOLOGY TEAM
• DEVELOPMENT
• PLANNING
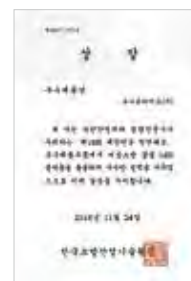• STANDARD AUTHENTICATION
• STANDARD ESTABLISHMENT

Certificate & License

Awarded the Presidential Commendation of Korea Electricity Culture Grand Prize

Ranked 1st in KoreaConsumer Satisfaction Index

Awarded the 15th Korea Safety Grand Prize

Awarded the silver prize of Patent Management Prize

Selected as family friendly excellent company

Selected as an excellent company brand of Seoul

Commendation by Prime Minister

World Invention Award in Geneva, Switzerland in 99
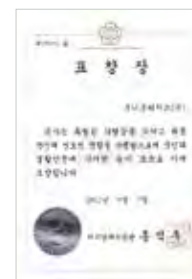

Awarded the 3rd Korea Safety Grand Prize

Awarded the 6th Korea Safety Grand Prize

Awarded the 11th Korea Safety Grand Prize

Awarded the 13th Korea Safety Grand Prize

Commendation of Ministry of Knowledge Economy

Commendation of Product Safety Day

Commendation of Minister of Commerce, Industry and Energy

Awarded the 22nd Trend Electricity & Energy Grand Prize

Selected as new intellectual

Awarded the 100 Best Patent Products Prize

EMERGENCY LIGHT

Emergency Light

It is the lighting which is installed in the living room or the evacuation passage so that people can safely evacuated in the case of power outage due to a fire. It is a lamp that is automatically switched to the emergency power when the general lighting is turned off in case of fire or emergency.

● **FIRE SAFETY STANDARDS FOR EMERGENCY LIGHT** ●

• **More than 11 floors excluding the basement.**

• **Available for wholesale market, retail market, passenger terminal, underground station or underground shopping center as underground or windowless floor.**

• **Installed in living rooms, corridor, stairway, and other passageways to the ground of a fire-fighting object.**

UNIONLIGHT LED Features

High efficiency illumination
5 times brighter than halogen lamp

Long life
Lamp life 50,000 ~ 100,000 hours
(Halogen lamp life 1,000 hours)

eco-friendly
NO hazardous substances!
Reduce greenhouse gas emissions

Natural color temperature
Less discomfort by heat
Healthy and natural light

Maintenance cost saving
Reduced the cost of electricity,
Maintenance, and cooling

Energy Saving
Reduce energy consumption
with high efficiency light

Higher efficiency, Longer life, More beautiful light.
UNIONLIGHT LED lighting is an eco-friendly lighting solution
with excellent energy saving effect.

Color rendering index comparison

▶
What is the color rendering index?

It is an index representing the degree to which objects can be identified. When it is used in a clothing store or other places, the color of the products is expressed better and the visibility is expanded.
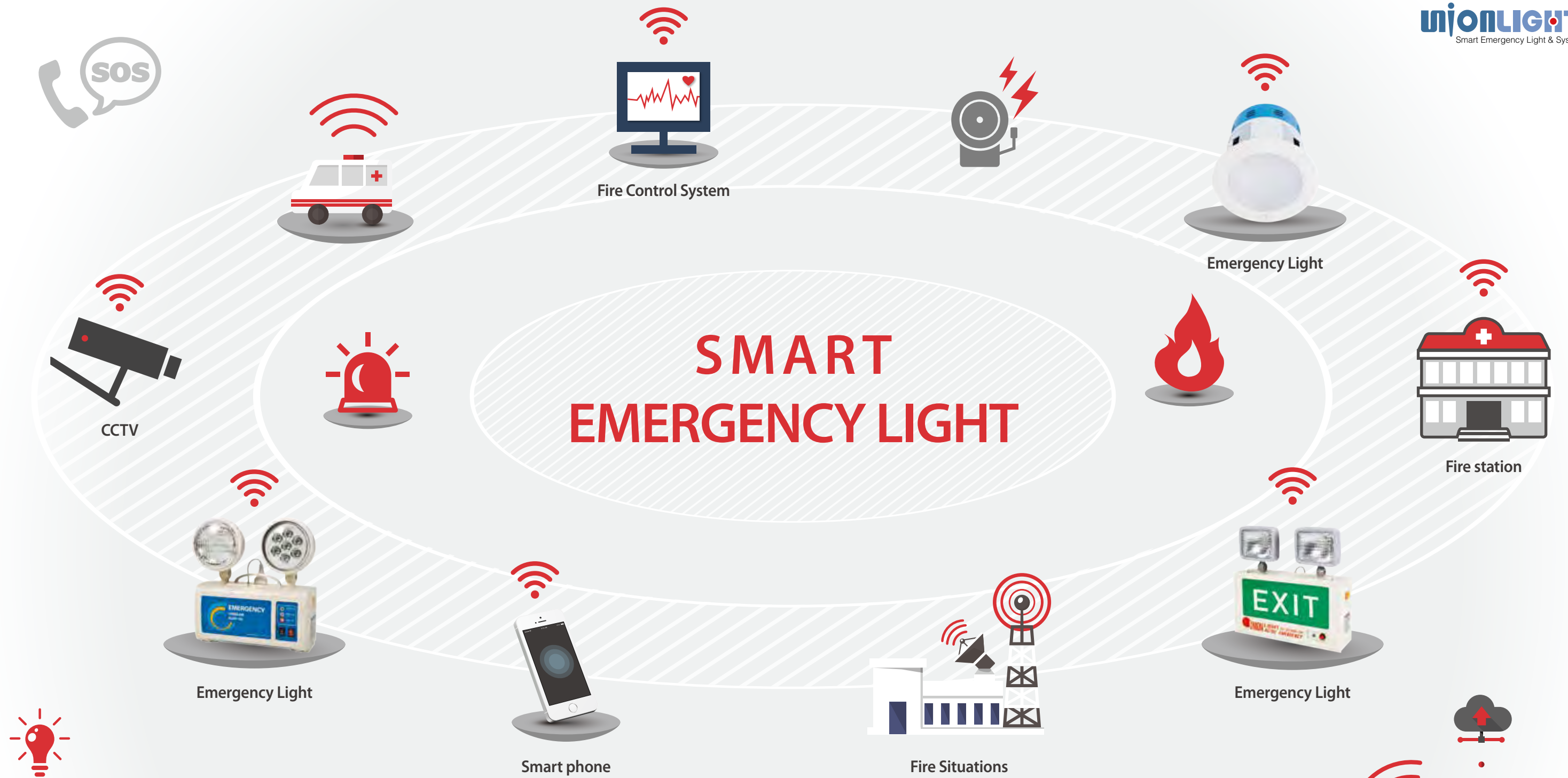
SOS

Fire Control System

Emergency Light

CCTV

Fire station

Emergency Light

Smart phone

Fire Situations

Emergency Light

SMART EMERGENCY LIGHT

Smart Emergency Light

- Improvement of the reliability and effectiveness of the emergency lighting maintenance.
- Smartification of entire safety system which includes equipments for ensuring evacuation routes in case of fire or emergency, fire extinguishing equipments and rescue system.

Features of Smart Emergency Lights

Electric Circuit Diagnostic function

▶ Charging / Discharging Control

Time it takes to be out of isolation : Take Several Days

▶ Dimming Control

Decrease in battery life over time

▶ Battery-capacity Check

Average height of installed emergency lights : higher than 3 meters (10 ft)

▶ Wireless Emergency-Test

SMART-EL-V10

Voltage Control

CHARGING   NORMAL

Voltage Value

Voltage of Battery   (V)

BATTERY LOW

Dimming   0

Emergency Test

TEST START

UNIONLIGHT
Smart Emergency Light & System

PRODUCT LINEUP

We UnionLight Co., Ltd. manufacture and manage all parts according to inspection standards for the best quality. We pride ourselves on the quality of our products because we only produce and deliver the products that have passed all the regulations set by the Korean Fire Fighting Industry Technical Institute and the International Quality Standard, Korea Institute of Machinery & Electric and Electronic Testing, and Korea Energy Management Corporation.

p.12
Fire Fighting Products
It is a product manufactured according to the technical standards of "Korea Fire Industry Technical Institute". It is designed with high quality and excellent performance for safe and quick evacuation in case of emergency due to fire.

p.25
Twin Light
In case of emergencies caused by fire or disaster, the bright lighting ensures a clear view to help people evacuate quickly.

p.23
Down Light
Normally, it is used as general lighting, and even after being turned off, it is automatically turned on as emergency lighting by detection of internal circuit during power failure.

p.28
Search Light
In emergency, it ensures clear view and high visibility with bright projection lighting.

p.34
Fluorescent
Normally, it is used as general lighting and lamp 2 lights up automatically in power failure or emergency.

p.36
Exit Light
Normally, only the emergency exit light will light up. In case of power outage or emergency, the lamp with the internal battery will light up at the same time.

p.38
Waterproof Light
The sealed design and structure of the waterproof ensures reliable function and lifetime even in harsh environments.

p.40
Multi Light
Emergency light, Warning light, Warning light, Searchlight, Siren, and a variety of other lighting equipment.

p.44
Explosion-Proof Equipment
Explosion-proof light and fire-fighting equipment ensure strong durability to withstand explosion.

p.42
Green Search Light
It is a green lighting equipment that ensures a high fog projecting rate with a red LED design.

www.unionlight.com

FIRE FIGHTING PRODUCTS

It is a product manufactured according to the technical standards of "Korea Fire Industry Technical Institute". It is designed with high quality and excellent performance for safe and quick evacuation in case of emergency due to fire.

USEN-100	NEW
ULED-12SM / ULED-12ST	NEW
ULED-6SM / ULED-6ST	NEW
ULD-60	
UD-308 / UD-309	
SOS-119 / SOS-119 (SET)	
ULED-100 / ULED-200	
ULED-10 / ULED-20	

Patent No. 0289508

USEN-100
NEW

LED 15W, 60min.
AC220V, DC24V

Emergency LED sensor light – UNI SENSOR

Normally, in case of fire or power outage, the general sensor will be turned on automatically by "Emergency light"

WHAT IS A UNISENSOR?

A built-in sensor that detects the movement of people in dark places, the light is automatically turned on / off in about 30 seconds without any additional switch operation. In particular, Unisensor is an emergency lighting functional sensor that detects power cut due to fire and power outage, and lights up immediately with internal battery to quickly find the exit in case of fire.

Normally
• Always use power : It is used as a sensor that lights up / off automatically for about 30 seconds by detecting human movement without any switch operation.
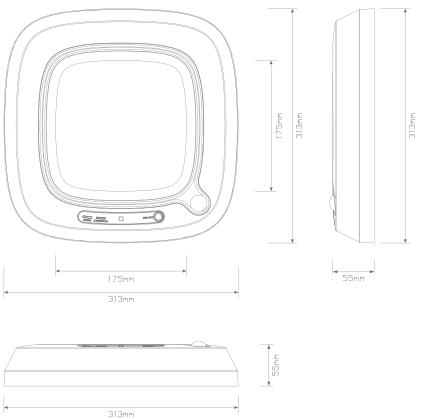
In emergency
• Automatically switch to emergency lighting when a power failure due to a fire.
• It is installed in the entrance, exit, corridor, stairs and balcony of a building or a house, and lights up for 60 minutes to facilitate evacuation in case of fire.

Product Features
• KFI Type Approval (fire fighting test) products
• All-in-one type of sensor light and emergency light
• The latest high performance sensor module
• Use 15W high-brightness LED
• Emergency power detecting lamp and test switches
• Motion Detection Distance : Within 10m
• Sensor operating time : 30 sec.
• Modern design
• Operating range : 120 °

Product Specifications

Emergency light (AC220V, DC24V, LED type, Protruding type, Combined type, Effective lighting time 60min.)			
Product type	Emergency Sensor Light	Type	LED type, Protruding type, Combination type, Effective lighting time 60min.
Rated input voltage	AC220V/60Hz	Effective lighting time	60 minutes
Rated input current	0.61A	Type of light source	White LED 0.5W × 30
Rated input power	13W	Spare power source	Nickel Cadmium 24V / 350mA
Weight	1.5Kg	Luminous flux standard voltage	20V

KFI Fire Fighting Product

LED

Money Save

ECO

LOW Temperature

Immediately

NEW
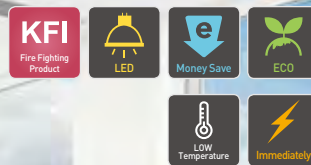
ULED-12SM | 50W, M-bar, 1200x300 (60min.)
ULED-12ST | 50W, T-bar, 1200x300 (60min.)

ULED-6SM | 55W, M-bar, 600x600 (60min.)
ULED-6ST | 55W, T-bar, 600x600 (60min.)

Emergency LED flat panel light

Emergency LED flat panel light

Union Light vs Existing LED

Union light flat panel light
- Emergency lighting product
- All-in-one modern design
- Long life of 50,000 hours
- Brightness equalization

Existing LED
: Interchangeable LED intuition lamp
- Low compatibility
- Indoor lighting and disparate design
- Stabilizer and causes of LED lifetime reduction
- Brightness instability

- It is used as a normal lighting. Even after a power outage, it is automatically switched by detection of an internal circuit, and "Emergency lighting" is performed for up to one hour.
- Emergency lighting circuit is integrated on the top of the light for easy installation.
- Illumination will be maintained at 90% of commercial lighting when emergency light is switched on. It does not feel psychological anxiety due to the change in illumination, so it can cope with the situation calmly (general products from other companies : 40% of normal lighting)
- The charging circuit prevents overcharging and overdischarging to keep the battery in good condition. (1/60C (30mA) or less maintained with floating charge after charging)
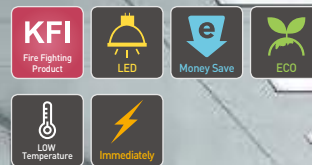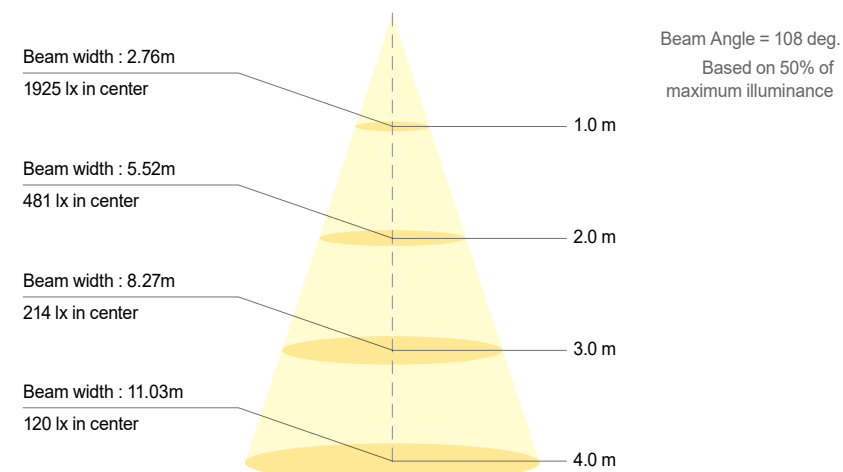
Emergency power supply monitoring lamp and test switch

Lamp color, charging status and abnormal status can be confirmed

● **Red lamp On : Abnormal**
   (charging, battery failure, fuse blown)

○ **Red lamp Off : Normal**

Illuminance Cone Diagram

Beam width : 2.76m
1925 lx in center

Beam width : 5.52m
481 lx in center

Beam width : 8.27m
214 lx in center

Beam width : 11.03m
120 lx in center

1.0 m
2.0 m
3.0 m
4.0 m

Beam Angle = 108 deg.
Based on 50% of maximum illuminance

Category / Model name	ULED-12SM	ULED-12ST	ULED-6SM	ULED-6ST
Effective lighting time	60min.			
Rated voltage	AC220V/60			
Rated input current	0.31A			
Rated input power	66W			
Type of light source	LED-0.2W x 264EA		LED-0.2W x 288EA	
Spare power source	Nickel Cadmium 48V/2,000mAh			
Luminous flux standard voltage & Luminous flux ratio	44V (90%)			
Weight	8.2kg	7.7kg	7.9kg	7.6kg
Type Approval Number	비15-7	비13-10	비15-6	비15-8
Application	General building (inside), Department store, School, Office, Military unit, Corridor, Underpass, Subway station, etc.			

Light distribution number

Light distribution number table		D-34		
	Illuminance (Lx)	1		
	Height (m)	2	3	4
	Horizontal distance (m)	3.7	3.8	3.6

ULED-12SM

ULED-6SM
540
603
540
603
95
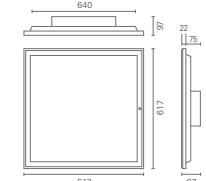
1195
1251
97

ULED-12ST

ULED-6ST
640
617
540
617
97

1158
1213
95
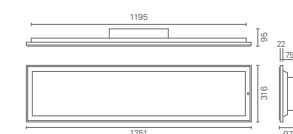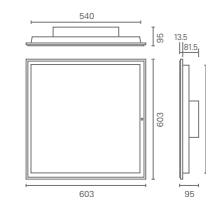
Certified product with high efficiency

General-purpose LED flat panel light series

(No emergency lighting function)

ULED-12M (50W) | **ULED-12T (50W)**
ULED-6M (55W) | **ULED-6T (55W)**

KFI

Emergency LED Panel Light

| Emergency lighting LED flat panel light (Slim edge type) | ULED-E12 |

Normally, it is used as normal lighting, and emergency lighting when power failure.

ECO · Immediately · LED · LOW Temperature

- Alternative as original three-wavelength or fluorescent light.
- Brighter than fluorescent light and less glare.
- Optimized light array minimizes shading, optimal light diffusion.
- Excellent lighting efficiency and economical efficiency, LED lighting for environmental consideration.
- Product life (50,000 hours) is five times longer than existing fluorescent light, high lighting efficiency, resulting in economical efficiency, low power consumption, low maintenance cost.
- AC220V, DC12V, LED type, embedded type, combination type, effective lighting time 60 min.

> Easy to install and durable, it can be applied to various places such as factories, production facilities, historical and commercial facilities

Application : Office, Shopping center, Parking lot, Factory and production facilities, History and public facilities, etc.
'Replaceable in all spaces where existing straight tube fluorescent lights are installed'

| Model	ULED-E12 (Slim Edge Type)
Effective lighting time	60min.
Rated voltage	AC220V/60Hz
Rated current	0.27A
Rated power	56W
Type of light source	LED 0.5W×156EA
Spare power source	Nickel Cadmium 12V/1300mA×4ea
Luminous flux standard voltage	11V
Luminous flux ratio	90%
Weight	6.7kg
Features	LED 56W fire fighting product / AC220V, DC12V, LED type, flush type, combination type, effective lighting time 60min.

KFI

Emergency LED Light

| Emergency lighting LED flat panel light | ULED-T17 / ULED-T17P / ULED-T17R |

- Product life (50,000 hours) is five times longer than existing fluorescent light, high lighting efficiency, resulting in economical efficiency, low power consumption, low maintenance cost.
- Optimized light array minimizes shading, optimal light diffusion
- Alternative as original three-wavelength or fluorescent light
- Brighter than fluorescent light and less glare
- Excellent lighting efficiency and economical efficiency, LED lighting for environmental consideration
- AC220V, DC12V, LED type, Embedded type, Combination type, Effective lighting time 60min.

ECO · Immediately · LED · LOW Temperature

ULED-T17   ULED-T17P   ULED-T17R

Normally, it is used as normal lighting, and emergency lighting when power failure.
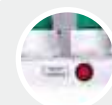
Inspection switch Emergency power detection

Application : Office, Shopping center, Parking lot, Factory and production facilities, History and public facilities, etc.
'Replaceable in all spaces where existing straight tube fluorescent lights are installed'

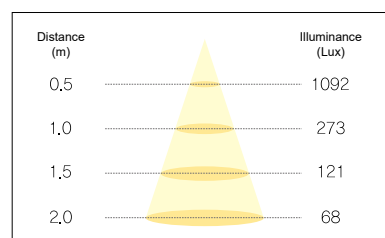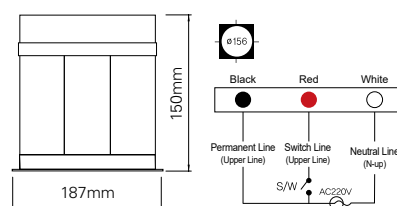| Models	ULED-T17 (Straight shade light)	ULED-T17P (Flat shade light)	ULED-T17R (Embedded opening slim type)
Effective lighting time	60min.	60min.	60min.
Rated voltage	AC220V/60Hz	AC220V/60Hz	AC220V/60Hz
Rated current	0.21A	0.21A	0.21A
Rated power	43W	43W	43W
Type of light source	Intuitive LED lamp 17W×2ea	Intuitive LED lamp 17W×22ea	Intuitive LED lamp 17W×22ea
Spare power source	Nickel Cadmium12V/1300mA×3ea	Nickel Cadmium12V/1300mA×3ea	Nickel Cadmium12V/1300mA×2ea
Luminous flux standard voltage	11V	11V	11V
Luminous flux ratio	90%	90%	90%
Weight	3.9kg	4.3kg	6.4kg
Features	Intuitive LED lamp 17W × 2EA fire fighting product / AC220V, DC12V, LED type, Embedded type, Combination type, Effective lighting time 60 min.		

ULD-60

LED 16W, 60min.

A220V, DC24V, LED Light
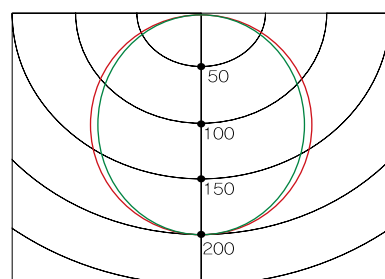Embedded type, Combined type, Effective lighting time 60min.

(Normal + Emergency lighting function)   Patent No. 0289508

Easy-to-install integrated LED down light

Black Red White

Permanent Line (Upper Line) Switch Line (Upper Line) Neutral Line (N-up)

S/W AC220V

187mm

150mm

Ø156

Built-in emergency light function on the top of product

- LED lamp has a high color rendering index and it is effective because it can be used to find a quick evacuation route in the case of emergency.
- It has superior energy efficiency compared to existing luminaires and has a 40 times longer lifetime than fluorescent lights, saving over 30% of electricity.
- Reduced ultraviolet rays and infrared rays, it prevents insects, and is an ecofriendly emergency light with no addictive harmful substances including mercury.
- Union Light's patented heat dissipation technology minimizes heat generation, eliminates the need for preheating time, and protects your eyesight by instant-on lighting without blinking when turned on or off.
- Reduction of construction cost: All-in-one LED down light is economical because it is easy to construct even in a low ceiling as well as in a small internal space.

Distance (m)	Illuminance (Lux)
0.5	1092
1.0	273
1.5	121
2.0	68

Direct illumination figure

50 / 100 / 150 / 200

Light distribution chart

Product Features

- Normally used as normal lighting. In case of an emergency or power failure, it is switched to emergency lighting immediately and lights up for up to 2 hours.
- Emergency lighting circuit is integrated on the top of the light for easy installation.
- Illumination will be maintained at 90% of commercial lighting when emergency light is switched on. It does not feel psychological anxiety due to the change in illumination, so it can cope with the situation calmly.
- The charging circuit prevents overcharging and overdischarging to keep the battery in good condition.

It is produced according to the technical standards of the Korea Fire Industry Technical Institute. Normally, it is used as a normal light, and after a power outage, it is automatically switched by detection of an internal circuit, and emergency lighting is performed for up to 2 hours.

Category / Model name	ULD-60
Effective lighting time	60 minutes
Rated voltage	AC220V / 60Hz
Rated input current	0.082A
Rated input power	16W
Type of light source	LED-16W
Spare power source	Nickel Cadmium 24V/600mA
Luminous flux standard voltage & Luminous flux ratio	20V (90%)
Weight / Size	1.6kg / 187(W)mm x 150(H) / Perforation size : 156±2(mm)
Type approval number	비16-13

Light Distribution Number		D-34		
Light Distribution Number Table	Illuminance (Lx)	1		
	Height (m)	2	3	4
	Horizontal distance (m)	3.7	3.8	3.6

UD-308

**FDL 26W / 20 min.
Emergency lighting combined**

AC220V, DC12V, Fluorescent type, Embedded type, Combination type, Effective Lighting time 20min.

UD-309

**FDL 26W / 60 min.
Emergency lighting combined**

AC220V, DC12V, Fluorescent type, Embedded type, Combination type, Effective Lighting time 60min.
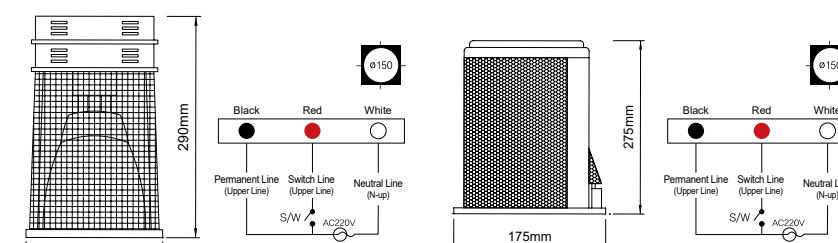
Normal Lighting / Emergency Lighting

Product Features

- Normally used as normal lighting. In case of an emergency or power failure, it is switched to emergency lighting immediately and lights up for up to 2 hours.
- Emergency lighting circuit is integrated on the top of the light for easy installation.
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- The charging circuit prevents overcharging and overdischarging to keep the battery in good condition.

It is produced according to the technical standards of the Korea Fire Industry Technical Institute. Normally, it is used as a normal light, and after a power outage, it is automatically switched by detection of an internal circuit, and emergency lighting is performed for up to 2 hours.

290mm / 175mm Black Red White Ø150
[UD-308]

275mm / 175mm Black Red White Ø150
[UD-309]

Category / Model name	UD-308	UD-309
Effective lighting time	20min.	60min.
Rated voltage	AC220V/60Hz	AC220V/60Hz
Rated input current	0.13A	0.15A
Rated input power	26W	31W
Type of light source	FDL-26	FDL-26
Spare power source	Nickel Cadmium 12V/2000mAh	Lead storage battery 12V/5Ah
Luminous flux standard voltage & Luminous flux ratio	11V (90%)	11V (90%)
Weight	2.4kg	4.5kg
Classification / Type approval number	Emergency light / 비07-2-2	Emergency light / 비07-20-1
Main body	175(W)×290(H)mm	175(W)×275(H)mm
Battery pack	60(W)×40(H)×180(D)mm	128(W)×80(H)×280(D)mm

Light Distribution Number		UD-308 (D-34)			UD-309 (D-34)		
Light Distribution Number Table	Illuminance (Lx)	1			1		
	Height (m)	2	3	4	2	3	4
	Horizontal distance (m)	3.7	3.8	3.6	3.7	3.8	3.6

KFI
Fire Fighting Product

DUAL LED

General Type　**Waterproof Type Set**　**General Type Set**

SOS-119

**Portable Emergency Light
LED 1W : 6hr.**
Size : 89(W) X 216(H) X 96(D)
(mm)

SOS-119 Set

**Portable Emergency Light
SOS-119(Waterproof / General)Set**
Size : 300(W)x290(H)x115(D) mm (General)
340(W)x280(H)x130(D) mm (Waterproof)

PREMIUM QUALITY

**Awarded champion
of Korea Safety Award
for portable emergency light**

Portable emergency light legal basis

*Enforcement Decree of the Presidential
Decree No.17154 Fire Service Act
Article 30 (5) (April 12, 2002)*

• Ministry of Government Administration
and Home Affairs Notification No. 2004-26
: National Emergency Management Agency

• Establishment of fire safety standards
(enforced in June 2004)

• Accommodation / Multi use
: Fire safety measures installation

• Product features : Portable lighting equipment for
emergency power outages&emergency evacuation
developed based on the technical standards of
the Korea Fire Industry Technical Institute.

Longest time (360 min.) in Korea, Portable emergency light

Capacity of one SOS-119 is 20 times of other cheap models in the market

Patent registration No. 0294966

| 20 min | Existing low-priced products lighting time 20min. | 360 min | SOS-119 Lighting time 360 min. |

Product Features

• This product can be checked immediately after pressing test switch on the bottom Patented
technology that solves the problem of battery consumption which is a defect of the complete
separation method of general products.

• It is economical due to battery replacement cost and labor cost savings
by reducing battery consumption by 1/3 during periodic inspection.

• The brightest portable emergency light
- POWER LED : Power consumption is 50% less than general bulb, using life is 2~3 times
- LENS : Combination of optically designed lens can make a stable irradiation surface
and excellent brightness

• Battery holder : The fully-detachable design of the battery holder ensures
complete separate and fast replacement of battery

• The holder can prevent foreign matter by blocking the front surface
of the lens to maintain normal illumination.

**Patented Technology**　Cradle structure / Reflector structure / Battery holder

Category / Model name	SOS-119
Effective lighting time	360min.
Lamp specifications	POWER LED 1W
Battery specifications	Alkaline AA
Voltage capacity	1.5V × 4ea
Current consumption	240mA

KFI
Fire Fighting Product

LED　Money Save　Immediately

DUAL LED

ULED-100

Diffusion 2W + Diffusion 2W : 120min.

AC220V, DC12V, LED type,
Protruding type, Exclusive type,
Effective lighting time 120min.

ULED-200

POWER

Intensive 4W + Intensive 4W : 60 min.

AC220V, DC12V, LED type,
Protruding type, Exclusive type,
Effective lighting time 60min.
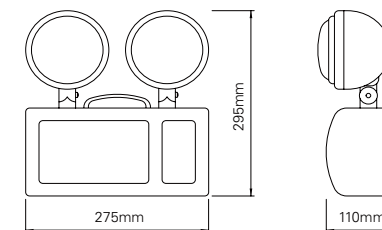
295mm

275mm　110mm

Twin Led Light Securing safe evacuation route

Twin Light is designed with a twin head for fire, power outage, emergency,
work to provide optimum performance without restriction of building structure
or space. By achieving brightness uniformity and current stabilization, LED
lifetime is not decreasd. A complete circuit design for LED emergency light
ensures clear visibility even in disaster.

Product Features

• In case of power outage or emergency, automatic operation is activated immediately
by detection of internal circuit.

• Operation confirmation switch : Press the test switch to confirm normal operation.

• Adjustable angle of the lamp : Adjustable head top / bottom / left / right depending
on building structure

• Battery protection circuit : Overcharge protection circuit design

• Charging input power : AC220V (60Hz)

Product Specifications

Category / Model name	ULED-100	ULED-200
Effective lighting time	120min.	60min.
Rated voltage	AC220V/60Hz	AC220V/60Hz
Rated input current	19mA	19mA
Rated input power	3.3W	3.3W
Type of light source	POWER LED : 1W x 4	POWER LED : 1W x 8
Spare power source	Nickel Cadmium 12V/1300mAh	Nickel Cadmium 12V/1300mAh
Luminous flux standard voltage	11V	11V
Weight	2kg	2.2kg
Type / type approval number	Emergency light / 비11-16-1	Emergency light / 비16-3

Light Distribution Number		ULED-100 (D-31)			ULED-200 (D-34)		
Light Distribution Number Table	Illuminance (Lx)	1			1		
	Height (m)	2	3	4	2	3	4
	Horizontal Distance (m)	1.8	1.0	–	3.7	3.8	3.6

KFI
Fire Fighting Product

LED

Money Save

DUAL LED

ULED-10

Fire Fighting Product / LED / Diffusion

1W×2EA : 60min. AC220V, DC7.2V,
LED type, Protruding type, Exclusive type
Effective lighting time 60min.

ULED-20

Fire Fighting Product / LED / for attaching on ceiling and wall

2W×2EA : 120min. AC220V

Diffusion type
LED fire fighting product

Category / Model name	ULED-10
Type / Type approval number	Emergency Light / 비11-17-1
Effective lighting time	60min.
Rated voltage	AC220V/60Hz
Rated input current / power	7.5mA/1W
Weight	700g
Type of light source	POWER LED : 1W x 2
Spare power source	Nickel Cadmium 7.2V/600mAh
Luminous flux standard voltage	7.0V

| Light Distribution No.	D-31		
Light Distribution Number Table			
Illuminance (Lx)	1		
Height (m)	2	3	4
Horizontal Distance (m)	1.8	1.0	–

300mm 125mm 70mm
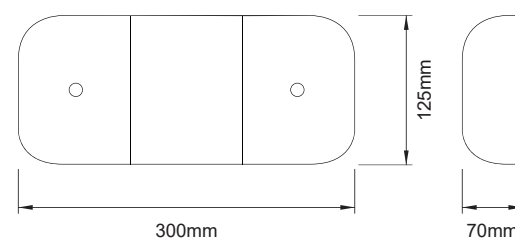
for attaching on ceiling and wall
LED fire fighting product

Ideal for modern interior with new conceptual emergency light design Variable head-angle adjustment

90˚ Angle adjustment

180˚ Angle adjustment

Category / Model name	ULED-20
Classification / Type approval No.	Emergency light / 비12-4
Material	Flame retardant ABS resin
Weight	1.4kg
Size	300(W)×125(H)×70(D) mm
Lense	Ø125 mm
Battery	Nickel Cadmium 12V/1300mAh
Lamp	POWER LED : 1W x 4
Usage time	2hr.

360mm 210mm 120mm
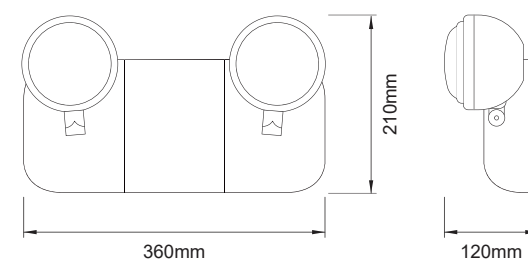
DOWN LIGHT

Down Light LED lamp has a high color rendering index and it is effective because it can be used to find a quick evacuation route in the case of emergency. In addition, all-in-one LED down light is economical because it is easy to construct even in a low ceiling as well as in a narrow internal space.

Emergency light automatically lights on in case of power outage

• Normally used as normal lighting. In case of an emergency or power failure, it is switched to emergency lighting immediately and lights up for up to 2hours.

• Illumination will be maintained at 90% of commercial lighting when emergency light is switched on. It does not feel psychological anxiety due to the change in illumination, so it can cope with the situation calmly. (General products from other companies : 40% of normal lighting)

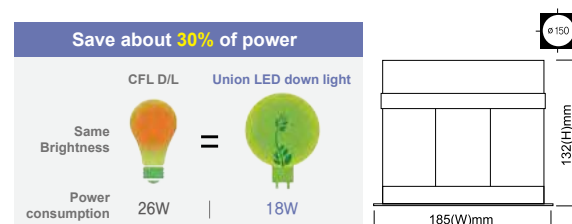**Regular + Emergency lighting function**

Easy-to-install all-in-one LED down light

• It has superior energy efficiency compared to existing luminaires and has a 40times longer lifetime than fluorescent lights, saving over 30% of electricity.

• Reduced ultraviolet rays and infrared rays, it prevents insects, and is an ecofriendly emergency light with no addictive harmful substances including mercury.

• Union Light's patented heat dissipation technology minimizes heat generation, eliminates the need for preheating time, and protects your eyesight by instant-on lighting without blinking when turned on or off.

• Emergency lighting circuit is integrated on the top of the light for easy installation.

• The charging circuit prevents overcharging and overdischarging to keep the battery in good condition.

USD-60A

UD-306 / UD-306 (Slim)

Applications

General building (Inside), School, Military unit, Corridor, Underpass, Subway station, Factory interior, Shopping mall

LOW Temperature · **LED** · **Energy Save** · **ECO**

Immediately · **DUAL LED**

SLIM TYPE

USD-60A

High efficiency equipment

LED 18W, General
(No emergency lighting function)

UD-306 / UD-306(Slim)

FDL 26W, 60min.
(Combined with emergency lighting)

High efficiency equipment certification

NO. 1137

- Very low power consumption due to high light conversion efficiency (1/8 of bulb, 1/2 of fluorescent light)
- LED light source realizes miniaturization and weight saving
- Longer life than existing lamps. (50~100 times)
- No warm-up time, the light turns on and off very quickly (2 million times)
- It is strong against shock and safe because there is no gas or filament.
- It is eco-friendly lighting because it does not use mercury or discharge gas as fluorescent lights.
- It is easy to construct even in a low ceiling as well as in a narrow internal space.
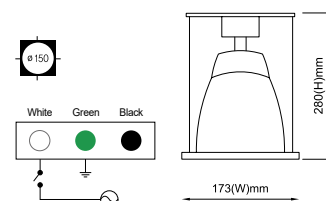- The unique heat dissipation design technology minimizes heat generation.

Normal general lighting / Emergency lighting in case of power outage

- AC220V 2-wire system simplifies installation. After a power outage, it is automatically switched by detection of an internal circuit, and the emergency lighting is performed for up to one hour.
- Normally : When using with general lighting, turns the switch on and off normally.
- Power outage : In case of power outage as well as normal lighting, it is switched to "emergency lighting" immediately after power outage.
- ※ Circuit design : AC sensor + inverter + charger (Nickel-cadmium battery)

Save about **30%** of power

CFL D/L — Union LED down light

Same Brightness

Power consumption — 26W | 18W

Ø150
132(H)mm
185(W)mm

Ø150
White Green Black
280(H)mm
173(W)mm

Category / Model name	USD-60A
Power consumption	16
Size	6 inch
Input voltage	220V
Luminous flux	1136.8
Light efficiency	70.72
Color temperature	5747
CRI	74
Size	185 x 132 mm
Weight	1.5kg
Lifetime	50,000 hours
Rated current	0.081A
Power factor	0.9

Category / Model name	UD-306 / UD-306 (Slim)
Rated input voltage	AC220V/60Hz
Rated input current	0.13A
Rated input power	26W
Type of light source	FDL 26W x 1EA
Spare power source	Nickel Cadmium 12V/2,000mAh
Maximum usage time	1hr (50min. ± 10min.)
Charging time	48hr.
Weight	2.4kg
Body (mm)	173(W) x 280(H), Slim : 173(W) x 100(H)
Battery pack (mm)	130(W) x 50(H) x 280(D)

TWIN LIGHT

Auto power on during power outage / Clear view securement

- In case of power outage or emergency, automatic operation is activated immediately by detection of internal circuit.
- Operation confirmation switch : Press the test switch to confirm normal operation.
- Adjustable angle of the lamp : Adjustable head top / down / left / right depending on building structure
- Battery protection circuit : Overcharge protection circuit design
- Charging input power : AC220V (60Hz)

TWIN LED LIGHT securing safe evacuation route

- Twin Light is designed with a twin head for fire, Power outage, Emergency, work to provide optimum performance without restriction of building structure or space.
- By achieving brightness uniformity and current stabilization, LED lifetime is not decreased. A complete circuit design for LED emergency light ensures clear visibility even in disaster.

ULED-30
SLED-101 / SSLED-102 / BLED-103
SLED-2400 / SB-2400(S)
SB-1010 / SS-1010 / BB-1010

Applications

General building (inside), School, Military unit, Corridor, Underpass, Subway station, Factory interior

비상조명등

LED | **Immediately** | **LED + SIREN**

LED | **Immediately**

LED | **Immediately** | **POWER** | **TWIN LED** | **Long-Time LED**
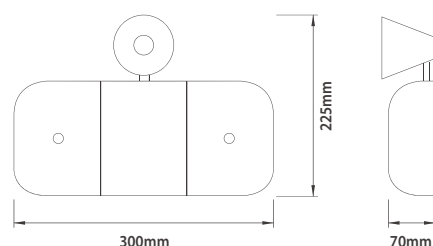
LED | **Immediately**

Siren
100dB

ULED-30

LED 2W
Emergency lighting+Siren
Dual function
1W×2EA : 30min.

SSLED-102

Focus 7W / Focus 7W : 3hr
LED / high brightness
Portable and attachable

SLED-101

Diffusion 4W / Focus 7W : 4hr
LED / Diffusion & concentration
Portable and attachable

BLED-103

Diffusion 4W / Diffusion 4W : 5hr
LED / Long-time use
Portable and attachable

Long-Time
TWIN LED

SLED-2400

Diffusion 4W / Focus 7W : 8hrs
LED / Portable and attachable

Long distance
Projection

SB-2400(S)

SEALD BEAM
Portable and attachable

SB-1010 / SS-1010 / BB-1010

HALOGEN·IL
Portable and attachable

Automatic power on during power outage to secure clear view

Help the blind and sleeping people to evacuate quickly by attaching a siren

Twinhead is designed for two purposes : Emergency lighting & portable lighting

Optimum performance without restriction of building structure and space

Twin Light Product Features

- In case of power outage or emergency, automatic operation is activated immediately by detection of internal circuit.
- Operation confirmation switch : Press the test switch to confirm normal operation
- Adjustable angle of the lamp : Adjustable head top / Down / Left / Right depending on building structure
- Battery protection circuit : Overcharge protection circuit design
- Charging input power : AC220V (60Hz)

Long-Time TWIN LED Emergency light

Category / Model name	SLED-2400	SB-2400(S)
Material	STEEL (Powder coating)	
Luminaires	ABS Resin	
Weight	7.0kg	6.8kg
Size (mm)	320(W)×310(H)×120(D)	300(W)×340(H)×120(D)
Lense	Ø125 mm	
Battery	Lead accumulator battery 12V / 10Ah	
Hours of use	Diffusion 4W 28hr / Focus 7W 12hr	Diffusion 8hr / Focus 70min.
Lamp capacity(W)	Diffusion 4W / Focus 7W	Focus 15W / Focus 100W
Simultaneous use(H)	8hr	1hr
Remarks	Long time use	Shield beam lamp

TWIN LED Emergency light

Category / Model name	SB-1010	SS-1010	BB-1010
Material	ABS Resin		
Lense	Ø125 mm		
Battery Capacity	Lead accumulator Battery 12V/5Ah		
Lamp capacity (W)	Diffusion 8W / Focus 35W	Focus 35W / Focus 35W	Diffusion 8W / Diffusion 8W
Usage time(H)	Diffusion 8hr / Focus 1hr 40min.	Focus 1hr 40min.	Diffusion 8hr
Simultaneous use(H)	1hr 30min.	50min.	4hr
Weight (kg)	3.7kg		
Remarks	Incandescent lamp / Halogen lamp	Halogen lamp	Incandescent lamp

- It is a TWIN LED emergency light which can be used for a long time by minimizing power consumption which is an advantage of LED.
- Optimum performance for portable applications where long-time work is required.

225mm
300mm
70mm

295mm
275mm
110mm

340mm
300mm
120mm

- SLED-2400 -   - SB-2400(s) -

Category / Model name	ULED-30
Material	Flame retardant ABS resin
Weight	1kg
Size	300(W) × 225(H) × 70(D) mm
Lense	Ø125 mm
Battery	Nickel Cadmium 7.2V/600mAh
Lamp	LED 2W
Siren	100dB
Usage time	30min.

Category / Model name	SLED-101	SSLED-102	BLED-103
Material	ABS resin		
Weight	3.9kg	4.6kg	4.4kg
Lens	Ø125mm Diffusion 4W+Focus 7W	Ø125mm Focus 7W+Focus 7W	Ø125mm Diffusion 4W+Diffusion 4W
Battery	Lead storage battery 12V/5Ah		
Usage time	4hrs of simultaneous use (12hrs of diffusion, 7hrs of concentration)	3hrs of simultaneous use (7W, 7hrs of concentration)	5hrs of simultaneous use (4W, 12hrs of concentration)

LED
SEARCH LIGHT

Long-distance projection LED for power outage and emergency ensures clear view

• Emergency bright projection light ensures clear view for high visibility.

High brightness • Long-time LED rechargeable searchlight

• By achieving brightness uniformity and current stabilization, LED lifetime is not decreased. A perfect circuit design for LED searchlight enables clear view when projected.

• Overcharge prevention circuit design : Protects the battery when it is under charge.

• In case of power outage, automatic operation is activated by detection of internal circuit.

• Lamp angle adjustment : Light Head up·down·left·right adjustable (The lamp head and angle can be adjusted, giving the user a free working environment)

SLED-747 / BLED-747 / ULED-747

UHID-747

US-1000 / TL-3000

ULTRA-5000 [NEW]

ULTRA-100 / ULTRA-200 [NEW]

Applications

Military units, Fire safety equipment, Police (inspection), KEPCO, Accident site, Subway (installtion), Industry, Security, Construction company (Electricity, Equipment), Leisure

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LED | Immediately | Long Time LED

BLED-747

4W : 12hours
LED / For Long time

SLED-747

7W : 7hours
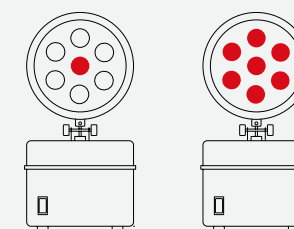LED / For High Brightness

Brightness Control LED

ULED-747

For up to 50 hours
7W : 7 hours / 1W : 50 hours
LED / brightness control function
(for high brightness or long time)

ULED-747 Product Features

Dual function in one

*Charge once for one-week travel
(Seven hours / day × 7 days)

▶ Step-1.
Turn all LED lamps (7) on to use as a high brightness searchlight.

▶ Step-2.
Turn only one LED lamp on for a long-time using.

One Lamp On
(50 hours)

7 Lamps On
(7 hours)

Constructed with 7 high brightness LED lamps / Brightness control function

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High brightness·Long-time LED rechargeable Searchlight

Product Features

• By achieving brightness uniformity and current stabilization, LED lifetime is not decreased. A perfect PCB design for LED searchlight enables clear view when projected.

• Overcharge prevention circuit design : Protects the battery when it is under charge.

Product Specifications

• Usage : Portable searchlight
• Material : ABS resin
• Lens : Ø110 mm

Product Features

• In case of power outage, automatic operation is activated by detection of internal circuit.

• Lamp angle adjustment : Light Head Up·Down·Left·Right adjustable (The lamp head and angle can be adjusted, giving the user a free working environment)

Product Specifications

Military units, Police, Fire safety equipment, KEPCO, Construction site, Accident site, Subway (installtion), Leisure, Fishing
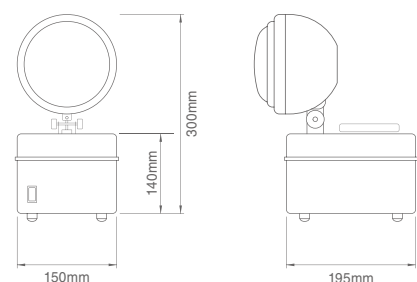
300mm | 140mm
150mm | 195mm
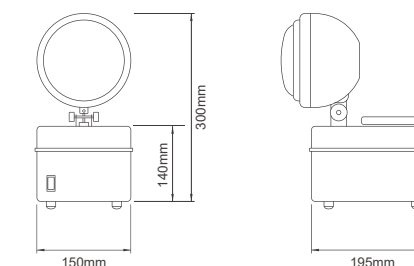
Category / Model name	SLED-747	BLED-747	ULED-747
Battery capacity		12V/ 5Ah	
Lamp capacity (W)	7W LED Lamp	4W LED Lamp	7W LED Lamp
Usage time (H)	7hr	12hr	7hr
Weight (kg)	3.8kg	3.7kg	3.8kg

LED | Immediately
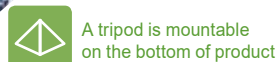
A tripod is mountable on the bottom of product

UHID-747
XENON HID / 35W

300mm
140mm
150mm
195mm

Super Xenon Searchlight
XENON HID lamp which used to be applied only to luxury car is portable!

Product Features
- The HID lamp is a close-to-sunlight that does not distract your eyes and greatly improves visibility at night, allowing you to see more spacious and farther.
- The lifetime of HID lamp lasts 4 to 5 times longer than the halogen lamp. There is no need to replace the lamp.
- It consumes only 35W, which is 3 times brighter than traditional halogen lamps and power consumption is 55W which is half of halogen lamps.
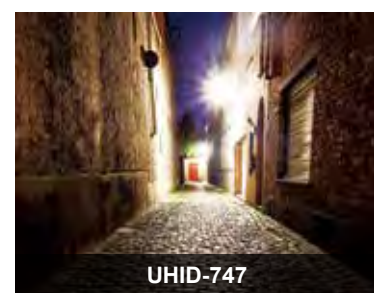 ※ XENON HID applied to luxury cars

Product Specifications
- Military, Police, Fire station, Fire suppression site, Construction site, Leisure, Fishing, Hunting, Subway. For fire and power outage
- Usage : Portable Searchlight
- Material : ABS resin

Comparison of brightness with Normal lamp
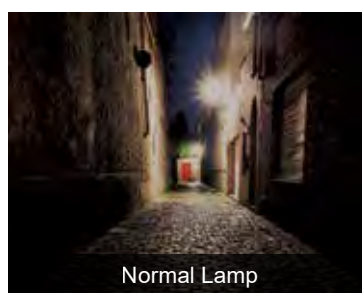
Normal Lamp | UHID-747

Category / Model name	UHID-747
Battery capacity	12V / 5Ah
Lamp capacity	35W
Usage time	1 hour 30 minutes
Weight	3.2kg

CAR-1000
Handle is sold separately

US-1000
35W : 100min
Continuous use of portable & cigar jack
HALOGEN

TL-3000
100W : 120min
Continuous use of portable & cigar jack
SEALD BEAM

Continuous use for automobile (12V) cigar jack

Portable Searchlight

Product Description
Halogen lamp produced by optical design have no blackening inside the lamp due to a constant light output (full beam) cycle.
It is a multipurpose lighting equipment with long life and high color temperature.
※ **Fix function of light handle**
Handle can be bent to 90° to free both of your hands during working.

Applications and Specifications
Military unit, Fire safety equipment, Police (inspection), KEPCO, Korea Telecom, Accident site, Subway (installation), Industry, Security, Construction (Electricity, Equipment) company, Leisure
- Application : Portable searchlight
    (AC220V / 12V connection for automobile)
- Material : ABS resin
- Size : 270 (W) x 150 (H) x 110 (D) mm
- Lens : Ø155mm
- Spring cord length : 3 m

Product Features
Power outage monitoring function (Emergency lighting automatically lights up during power outage) Normally, AC220V is maintained in charging state. When power outage occurs, it lights up automatically, so you can quickly carry the US-1000 to cope with emergency situations.
<Overcharge prevention circuit : Protects the battery when it is charging>
- Adjustable angle of the lamp
  : Light head can be adjusted Top / Down / Left / Right
    <Light (Spring cord) Length : 3m>

Long-Distance Projecting Searchlight

Product Description
- This product can be connected to a car (12V) cigarette lighter (socket) for continuous use.
- When using portable, you can carry the backpack (Battery power) on your shoulders.
- Light is a Sealed Beam structure manufactured by optical design. It is a vacuum structure with lens and reflector to block foreign matters. It is a lighting equipment developed with constant illumination and long distance use. (Projection distance : 1km)

Applications and Specifications
Military unit, Fire safety equipment, Police (inspection), KEPCO, Korea Telecom, Accident site, Subway (installation), Industry, Security, Construction company, Leisure
- Application : Long-distance projection searchlight
- Size : 280 (W) x 400 (H) x 185 (D) mm
- Material : ABS resin searchlight
- Lens : Ø160mm
- Lamp cord : 3m (Spring cord)

Product Features
- Automotive Power(DC12V)
  : Can be connected to cigarette lighter(socket) for continuous use
- Portable(Backpack) : Connected to the battery power inside the backpack
- Internal battery (12V) power available
  : Used as power source for electronic products and power tools
- Overcharge Prevention Circuit : Protects the battery when it is charging
  * Ergonomic design minimizes weight and can be worn on shoulders
    (Defense, Police, Firefighting, agriculture, fishery, animal husbandry, work, etc.)

Category / Model name	US-1000	TL-3000
Battery capacity	12V/5Ah	12V/18Ah
Lamp capacity (W)	35W	100W
Usage time (H)	100min.	120min.
Weight (kg)	3.2Kg	6.9Kg

Long Time LED

LED Energy Save ECO

All-Weather Portable LED floodlight

By achieving brightness uniformity and current stabilization, LED lifetime reduction is prevented. The perfect PCB design for LED searchlight ensures clear visibility for long working hours.

Usage

Military unit, Fire safety equipment, Police (inspection), KEPCO, Ship, KT, Hospital, Construction site, Accident site, Subway(Installation)

Product Specifications

- Material : ABS, STEEL (powder coating)
- Weight : 15kg
- Battery capacity : Lithium iron phosphate 48V 3Ah
  2batteries can be installed (10 hours use) - Order specification
- Size : 289(W)×1180(H)×310(D) mm

Product Features

This product is used for charging AC220V / DC48V and can be continuously used with AC power. The internal battery power can be used as HAND CART in an emergency.

Super strong floodlight (LED portable floodlight)

POWER

DC usage time : 6 hours / normally used with AC 220V continuously, can be used for 6 hours with an internal rechargeable battery in an emergency.

Super strong Floodlight LED 24W

All-weather portable design that can be used in harsh environments

AC / DC

Used as an internal battery in the palces without electricity. Continuous use with AC 220V power supply

LED

The heat sink is applied to the entire LED flasher to minimize heat generation.
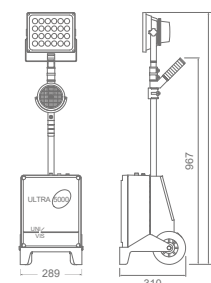
Replace existing 200W with 24W of power consumption

HQI 200W   High efficiency   LED 24W

The 24W LED floodlight is available as a substitute for 200W halogen.
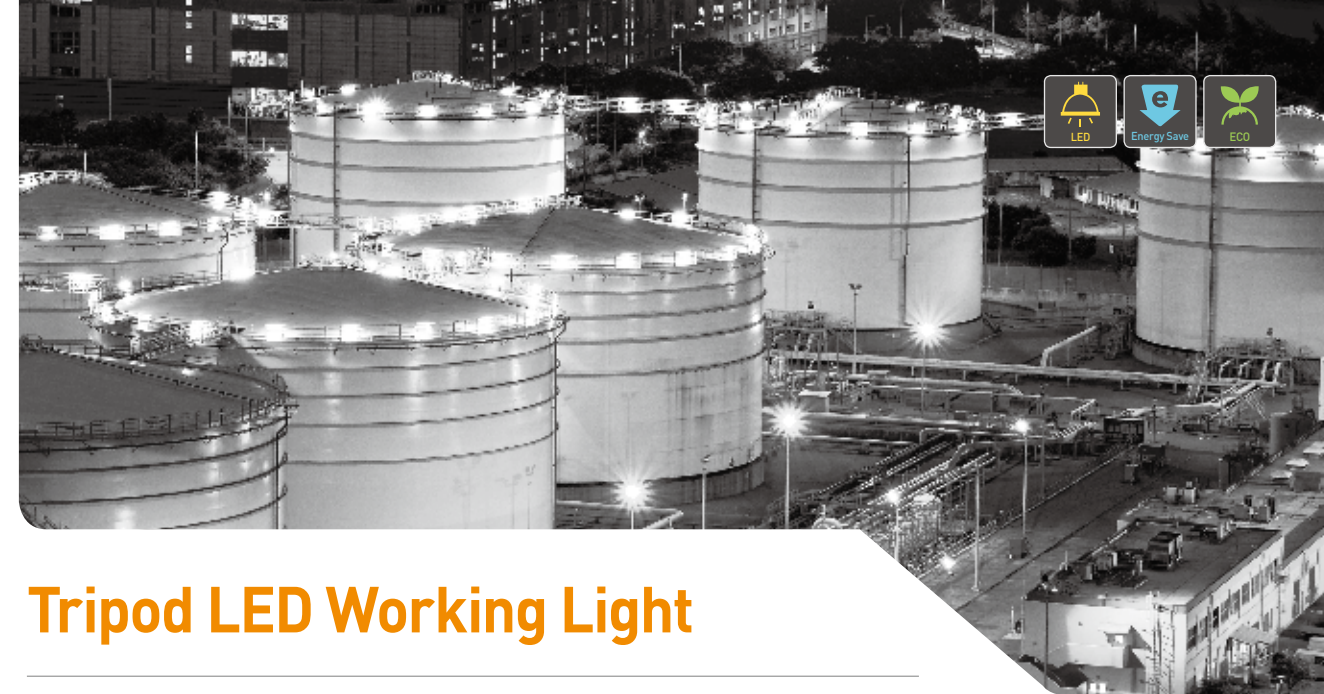
1180
967
289
310

Floodlight(LED 24W) + Close-up light(LED 2.6W) + Rear warning light(LED 1W)

- AC220V / DC48V connection : Can be used continuously
- Can be used only with internal battery power in case of emergency
  Adjustable height : 1st stage : 1,180mm / 2nd stage : 1,900mm
- Close-up light (auxiliary lamp) : With 3m cord in a small space
- Adjustable lamp height and angle
- Battery protection circuit : Overcharge prevention circuit design
- Input power : AC 220V (60Hz) / Charging time : 2hrs 30min (±10%)

ULTRA-5000

ALL-WEATHER PORTABLE LED FLOODLIGHT

LED / 24W / AC • DC

Searchlight for Close-up lighting (LED 2.6W) (3m spring cord)

High brightness LED signal lamp for rear safety

90° Angle Adjustment

Height Adjustment

Minimum Heigh : 1,180mm

Maximum Height : 1,900mm

Blue / Red LED Flicker 3 times

Tripod LED Working Light

- All-weather LED floodlight is available with AC 220V power supply
- Easy to set up and move with a exclusive floodlight tripod, which allows accurate projection at the desired location.
- Improved luminous efficiency by applying concentrated and diffused lenses to LED lamps
- Low power consumption
  - Very efficient with significantly lower power consumption than existing lamps.
  - 80% reduction in electric charge compared to existing halogen HQI light
- Semi-permanent lifetime of about 50,000 hours reduces maintenance costs
- Eco-friendly lighting

Lamp	Input Voltage	Input Watt	IP
LED 24W LED 24W x 2	12	38.4	65
Size	Weight	Cord Length	Lamp Life span
W : 1,250mm H : 680 ~ 1,900mm	8kg	3M	50.000h

ULTRA-100

LED / 24W / Lamp 1

ULTRA-200

Lamp 2 / Individual switch

Step-by-step angle adjustment & 360° rotation of floodlight head

Floodlight Head

360° Angle Adjustment

Height adjustment (up to 1,900mm)

Height adjustment

FLUORESCENT

Emergency light with Fluorescent lighting fixtures

UF-207 / UF-407 / UF-408

Applications

Military unit, Department store, Hotel, School, Factory, Dormitory, Senior facilities, Disabled facilities, Underground parking lot, Subway station, etc.

Uninterruptible fluorescent light / Uninterruptible fluorescent ballasts

- Normally used as normal lighting. In case of an emergency or power failure, lamp 2 lights automatically. It improves the illumination level of less than 40% of existing emergency lights to more than 70%. It is as same as the general illumination by naked eyes, and does not cause psychological anxiety during power outage.
  - Circuit configuration
    : Electronic ballast + inverter + charger
  - Battery pack = Nickel cadmium battery (24V / 2000mA)

- Circuit design to ensure lamp life when emergency light is on
  - Since the voltage stabilized by the electronic ballast in the inverter drives the lamp, it prevents blackening of the fluorescent lamp.
  - The soft start circuit prevents the impact voltage from flowing into the fluorescent lamp immediately during the initial startup of the lamp.

- SMPS-based circuit design to ensure battery life
  - SMPS, constant voltage and constant current circuit

design prevents overcharging and overdischarging to keep the battery in top condition Maintain 1 / 60C (30mA) or less with floating charge after completion of charging.

- Minimize EMI to extend the usage life of ballast (KS standard level)
  Conductive noise and radiated noise of the ballast have no effect on other devices and can be used safely in places sensitive to EMI.

- Harmonic content of the ballast is kept below 15%, and it does not affect the electric, electronic devices, shut-off devices, and power devices connected to the power source at all.

- It can operate stably even at low temperature even below -10°C by designing the initial drive circuit.

- It does not affect the component elements even at 175~250V of input power source, so the reliability of stable operation is high due to wide response range of ballast against input voltage.

UF-207
Embedded uninterruptible fluorescent light
32W / 2 Lamps / 60min.

UF-407
Embedded uninterruptible fluorescent light
32W / 1 Lamps / 60min.

UF-408
Embedded uninterruptible fluorescent light
32W / 2 Lamps / 60min.

Emergency lighting function added to existing luminaires

Product Features (AC220V / 2-Wire or 3-Wire)

- Normally used as normal lighting.

  In case of an emergency or power failure, lamp 2 lights automatically. (AC220V / 2-wire or 3-wire) It improves the illumination level of less than 40% of existing emergency lights to more than 70%. It is as same as the general illumination by naked eyes, and does not cause psychological anxiety during power outage.
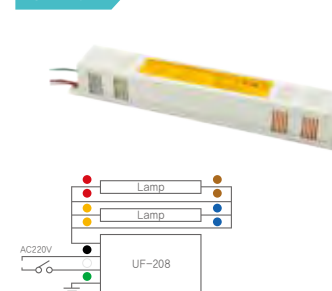 - Circuit configuration : Electronic ballast + inverter + charger
  - Battery pack = Nickel cadmium battery (24V / 2000mA)

  ※ **Emergency lighting time : 1 hour**
  (Lights up during power outage even after it is turned off)

- SMPS-based circuit design to ensure battery life
  - SMPS, constant voltage and constant current circuit design prevents overcharging and overdischarging to keep the battery in top condition.
  - Maintain 1/60C(30mA) or less with floating charge after completion of charging

- Minimize EMI to extend the usage life of ballast (KS standard level)
  - Conductive noise and radiated noise of the ballast have no effect on other devices and can be used safely in places sensitive to EMI
  - Harmonic content of the ballast is kept below 15%, and it does not affect the electric, electronic devices, shut-off devices, and power devices connected to the power source at all.
  - It can operate stably even at low temperature even below -10℃ by designing the initial drive circuit.
  - It does not affect the component elements even at 175 ~ 250 V of input power source, so the reliability of stable operation is high due to wide response range of ballast against input voltage.
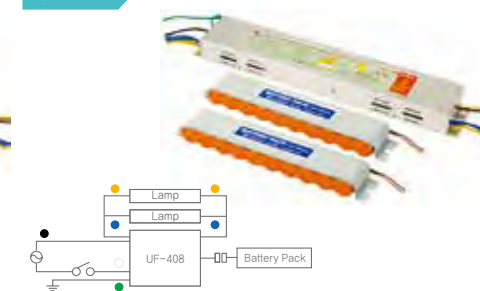
Category / Model name	UF-207	UF-407	UF-408
Rated input voltage	AC220V / 60Hz	AC220V / 60Hz	AC220V / 60Hz
Rated input current	0.09A	0.185A	0.28A
Rated input power	19W	31W	60W
Rated secondary (load) voltage	57V (Loading)	140V (Loading)	140V (Loading)
Rated secondary (load) current	0.30A	0.30A	0.30A
Battery capacity	12V/2000mAh	12V/2000mAh	24V/2000mAh
Charging time	48hr	48hr	48hr
Maximum usage time	1hr (±10min)	1hr (±10min)	1hr (±10min)
Ballast size (mm)	365(W)×49(H)×58(D)	365(W)×49(H)×58(D)	297(W)×25(H)×50(D)
Battery pack size (mm)	Integral	250(W)×25(H)×45(D)	250(W)×25(H)×45(D) 2EA
Weight / Power saving size	840g / E-Type, High power factor	840g / A-Type	1.5kg / A-Type

EXIT LIGHT

Emergency exit guide light
+ Dual functional emergency light

Normally, only the emergency exit light will be on. In case of power outage or emergency, the guide light and the emergency light are simultaneously turned on by the internal battery power.

- Brightness is constant because there is no refraction due to adopting high brightness LED and halogen lamp.
- Compared to the lamp and battery capacity, the usage time is longer and the weight is lighter.
- There is an overcharge protection circuit in to protect the battery.
- High efficiency and brightness LED maximizes evacuation and guiding effect of guide light sign
- In case of power outage or emergency, the internal battery power source lights the guide light (LED 3W) and the emergency light (halogen 30W) with high projection power at the same time
- LED guid light has lower power consumption, better illumination, and no lamp replacement than products using traditional fluorescent lights.
- Integrated design of guide light + emergency light for modern buildings

UEX-1020 / UEX-1020(S)

UWP-1030 / UWP-1030(S)

Applications

School, Military unit, Shopping mall, Industrial complex, Hospital, General building(inside), Corridor, Underpass, Subway, Factory Interior

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DUAL LED

Waterproof

UWP-1030

Guide emergency Light
Emergency light(halogen) 15W × 2
Guide light (LED) 3W : 90min.

Waterproof

UWP-1030(S)

Guide emergency Light
Emergency light(halogen) 15W × 2
Guide light (LED) 3W : 90min.

UEX-1020

Guide emergency Light
Emergency light(halogen) 15W × 2
Guide light (LED) 3W : 90min.

UEX-1020(S)

Guide emergency Light
Emergency light(halogen) 15W × 2
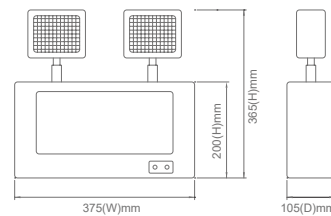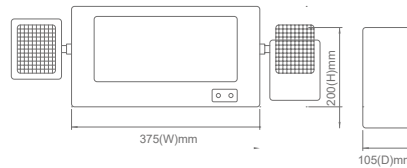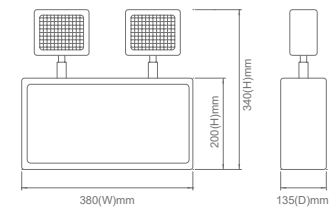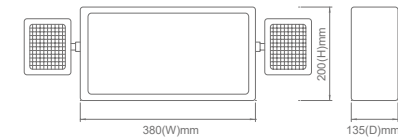Guide light (LED) 3W : 90min.

Guide Emergency Light

[UEX-1020]

[UEX-1020(S)]

[UWP-1030]

[UWP-1030(S)]

Category / Model name	UEX-1020	UEX-1020 (S)	UWP-1030	UWP-1030 (S)
Material	STEEL (Powder Coating)			
Luminaires	Nylon resin			
Enclosure	Steel			
Size	375(W)×365(H)×105(D)	375(W)×200(H)×105(D)	380(W)×340(H)×135(D)	380(W)×200(H)×135(D)
Weight	6.4kg	6.4kg	6.5kg	6.5kg
Battery capacity	12V/5Ah			
Usage time	90min.			

LED WATERPROOF LIGHT

Waterproof type
LED Emergency light for power outage

**The waterproof sealed design and structure ensure reliable function and lifetime of product even in harsh environments.
The case (polycarbonate) is excellent in insulation and can be used for applications such as emergency lighting and work lighting.**

By achieving brightness uniformity and current stabilization, LED lifetime is not decreasd. A perfect PCB design for LED searchlight enables clear view even in a disaster or emergency.

Waterproof

UWP-2000

UWP-3000

Applications

School, Military unit, General building, Corridor, Underpass, Subway, Factory outside, Underground communication areas, Tunnel, Industrial site, Emergency work

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UWP-2000

LED Emergency light
Diffusion : 4W / Focus : 7W / 5hrs

UWP-3000

LED emergency light (Floodlight)
Square focus 15W / 3 hrs
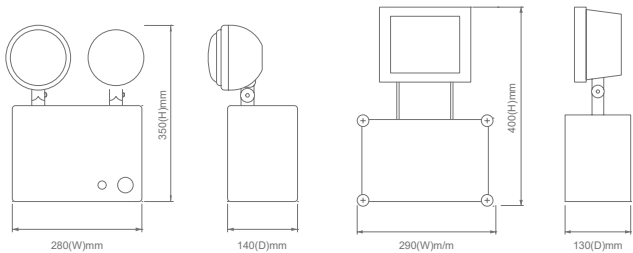
Waterproof LED emergency light

Waterproof

Product Features

- In case of power outage or emergency, automatic operation is activated immediately by detection of internal circuit.
- Operation confirmation switch
  : Press the test switch to turn the light on during charging.
- Adjustable angle of the lamp (head angle adjustment)
  : Two lamps can be used simultaneously or separately
- Battery protection circuit design
  : Overcharge protection circuit is used for battery protection.
- Waterproof sealed design and structure ensure reliable function and lifetime even in harsh environments. The case (polycarbonate) is excellent in insulation and maintains the thermal deformation temperature (-50~108°). It can be used for applications such as emergency lighting and work lighting.

Product Specifications

- Application : Attachable / Portable (Custom made)
- Size : 280(W)×350(H)×140(D) mm
- Weight : 5.2kg   • Lens : Ø 125mm

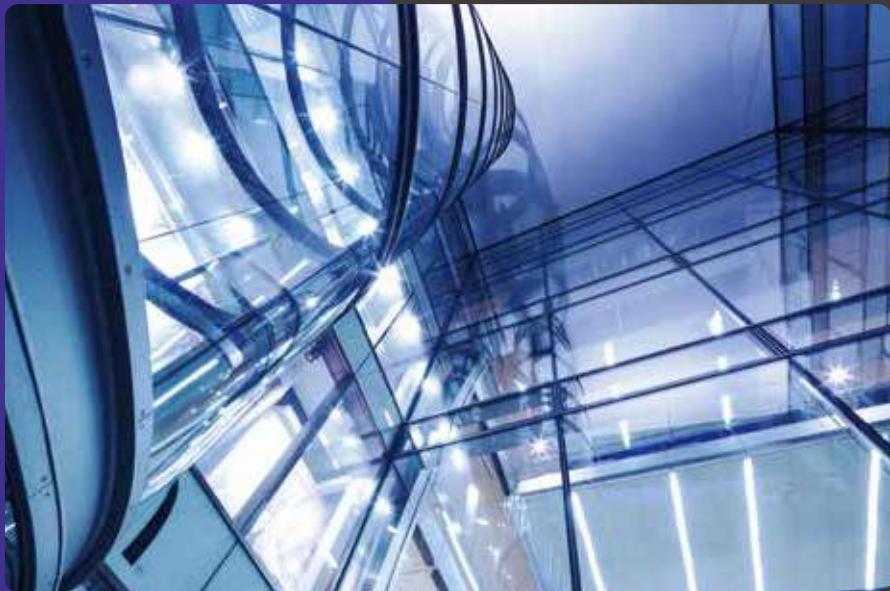## Waterproof LED emergency light

Waterproof

FLOODLIGHT

Product Features

- In case of power outage or emergency, automatic operation is activated immediately by detection of internal circuit.
- Operation confirmation switch
  : Press the test switch to turn the light on during charging.
- Adjustable angle of the lamp (head angle adjustment)
  : Two lamps can be used simultaneously or separately
- Battery protection circuit design
  : Overcharge protection circuit is used for battery protection.
- Heat sink all-in-one design maximizes heat dissipation effect
- Waterproof sealed design and structure ensure reliable function and lifetime even in harsh environments. The case (polycarbonate) is excellent in insulation and maintains the thermal deformation temperature (-50~108°). It can be used for applications such as emergency lighting and work lighting.

15W LED FLOODLIGHT CAN BE USED TO REPLACE HALOGEN 150W.

HQI 150W   High Efficiency   LED 15W

Category / Model name	UWP-2000	UWP-3000
Battery capacity	12V/5Ah	12V/5Ah
Lamp capacity (W)	L : LED 4W / R: LED 7W	Square focus 15W
Usage Time (H)	5hr (±15min)	3hr (±10min)
Weight (kg)	5.2kg	6kg
Size (mm)	280(W)×350(H)×140(D)	290(W) x 400(H) x 130(D)

MULTI LIGHT

Perform various functions in an emergency

Waterproof sealed design and structure ensure reliable function and lifetime even in harsh environments. The case (polycarbonate) is excellent in insulation and can be used for applications such as emergency lighting and work lighting.

By achieving brightness uniformity and current stabilization, LED lifetime is not decreasd. A perfect PCB design for LED searchlight enables clear view even in a disaster or emergency.

COMBI-2 / COMBI-3

Applications

Military unit, Police (check), School, Dormitory, Hospitals, Underground Parking lot, Production line, Dangerous area sign, Construction site, Traffic control, etc.

COMBI-2
Emergency light + Warning light
Dual functional light

COMBI-3
Emergency light + Warning light + Siren
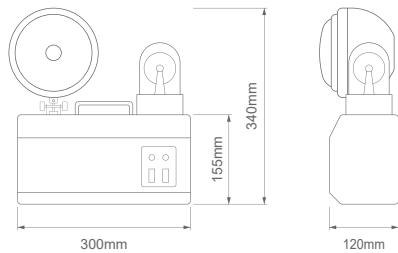Triple function in one

Emergency light + Warning light

Product Features

As a warning light + an emergency light, it can be used simultaneously during a power outage to help people quickly evacuated to a safe area. It is a portable and rechargeable lighting equipment that can be used for various purposes such as military unit, police (inspection) equipment, danger zone control in a disaster area.

- Emergency light
  : It is activated automatically (lights up) in case of power outage.
- Portable lighting
  : Warning light and searchlight can be used separately as well as simultaneously
- Battery protection circuit design
  : Overcharge protection circuit is adopted for battery protection.

Applications and specifications

- Military unit, fire fighting, Police (inspection), Accident site, Parking lot, Constructionsite, Traffic control, Danger zone
- Material : Case-STEEL (Powder coating)
- Luminaires : ABS resin
- Lens : Emergency light Ø155mm
- Warning light : Ø100mm
- Size : 300(W)×340(H)×120(D) mm

Emergency light + Warning light + Siren

Product Features

In case of power outage or emergency due to fire during charging, Siren(100dB) + Warning light(8W) + Emergency light(35W) automatically operate simultaneously (triple function in one). It is a rechargeable disaster prevention lighting equipment that can prevent the loss of life and property by delivering the situation quickly in an emergency.

※ The siren is adjusted (ON / OFF) by the switch operation on the left side of the product.

- Military unit, Police (inspection), Civil defense equipment, Department store, Hotel, School, Dormitory, Senior facilities, Audiovisual facilities, Underground parking lot, Danger zone, Construction site
- Application : Attachable
- Material : STEEL (Powder coating)
- Luminaires : ABS resin
- Lens : Emergency light Ø125mm

Applications and specifications

- Power outage (emergency)
  : Emergency light + Warning light + Siren are activated automatically
- Operation confirmation switch
  : Press the test switch to confirm normal operation.
- Adjustable angle of the lamp
  : Adjustable light head top / down / left / right
- Battery protection circuit
  : Overcharge protection circuit design
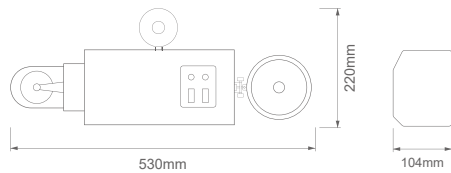
Category / Model name	COMBI-2	COMBI-3
Battery Capacity	6V/10Ah	6V/10Ah
Lamp Capacity (W)	Light 35W / Warning light 8W	Light 35W / Warning light 8W / Siren 100dB
Usage Time (H)	1 hour 40 minutes / 4 hours	1 hour 40 minutes / 4 hours / 30 hours
Simultaneous Use	1 hour 30 minutes	1 hour 10 minutes
Weight (kg)	4.3kg	4.3kg

GOLF COURSE FOG LIGHT

GREEN SEARCH LIGHT

Red LED design ensures high fog projections

Long-distance projecting LED golf course fog light, "Green Search"

Illumination is 5 times higher than halogen and 10 times higher than incandescent light.

When the position of each hole in the game is not confirmed due to fog, Green Search's powerful LED flashing light is necessary to help operate the game normally.

UFO-10

UFO-30

UFO-10

LED / Diffusion type
Power LED 6W : 6hr

UFO-30 Waterproof

LED / Premium type
Power LED 12W : 6hr

(12V/6W)
Golf course fog light

At an illumination level of 40W of general lamp, lamp life is 50 times

Product Features

- High luminous intensity LED lamp and lens can illuminate farther than 150lm at 1W
- Illumination is 5 times higher than halogen and 10 times higher than incandescent light.
- Long-distance projection (high fog projection ratio with red LED design)
- Semi-permanently available LED lamp.
- LED metal, PCB and Heatsink can contol heat generation
  ※ The lens is made of Polycarbonate which is resistant to external impact

Applications and specifications

- Application : Danger zone, Golf course (Fog light)
- Size : 150 (W) x 300 (H) x 195 (D) mm
- Material : Flame retardant ABS resin
- Weight : 2.3kg
- Battery : Ni-cd (Cadmium) 12V / 2,000mAh

(12V/12W)
Waterproof Golf course fog lights

At an illumination level of 80W of general lamp, lamp life is 50 times

Product Features

- High luminous intensity LED lamp and lens can illuminate farther than 150lm at 1W
- Illumination is 5 times higher than halogen and 10 times higher than incandescent light.
- Long-distance projection (high fog projection ratio with red LED design)
- Semi-permanently available LED lamp. [Seoul semiconductor 'LED P4 (R42180)' used]
- LED metal, PCB and Heatsink can contol heat generation
  ※ The lens is made of Polycarbonate which is resistant to external impact

Applications and specifications

- Application : Danger area, Golf course (Fog light)
- Size : 260(W)×380(H)×130(D)mm
- Material : Waterproof ABS, Flame retardant high strength polycarbonate
- Weight : 5.7kg
- Battery : Lead accumulate battery 12V / 5Ah

| Performance comparison between LED lamp and general lamp					
Lamp	Brightness	Usage time	Battery capacity	Lamp life (h)	Environment
LED	12W	6 hours	12V/5Ah (Lead accumulate battery)	50,000 to 100,000 hours	Eco-friendly
Halogen	5 times	2 times		1,000 hours	Halogen Gas
Incandescent lamp	10 times	2 times		200 hours	Mercury Contained

EXPLOSION-PROOF DEVICE

(EMERGENCY LIGHT)

Can be safely used in industrial sites where there is a risk of explosion.

The risk of explosion is not limited to factories and storage facilities, but can spread to nearby factories and residential areas.
It can prevent the risk of explosion in advance.

Applications

Power plant, Coal mine,
Petrochemical, Gas,
Refinery plant and storage
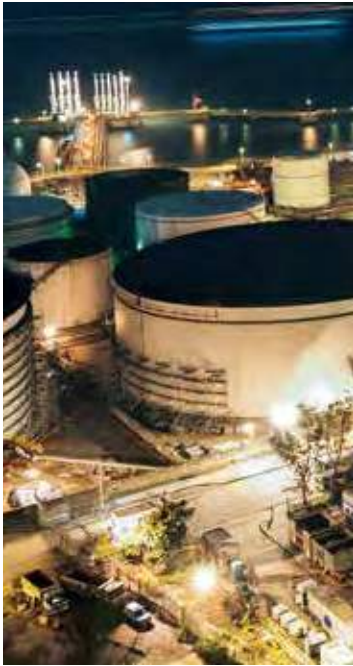
Explosion-proof overview

Importance of explosion-proof device

In petrochemical, gas and refinery related factories and storages, many dangerous substances are processed at high temperature and high pressure. There is a risk of fire or gas poisoning caused by explosion. Further more, the explosion of these factories is not limited to factories and oil storage facilities, but spreads to nearby factories and residential areas, causing major accidents. Therefore, design, construction and operation must be carried out in these areas with the precise concept of explosion prevention to prevent the risk of explosion.

Types of explosion-proof structure

1. Types of explosion-proof structure

Explosion-proof Structure	Definition	Symbol
Explosion proof structure	When the explosion occurs in the container, the container can proof the explosion pressure. Structure that is not to be exposed to the outside through the joint part and open part.	Exd
Safety explosion - proof structure	Structure to increase safety against mechanical or electrical structure or temperature rise to prevent ignition source during normal operation (Probability of failure 0)	Exe
Intrinsic safe explosion - proof structure	Structure to prevent the explosion of ignition source (Electric spark, Arc, High temperature) at normal time and accidents (Disconnection, Short circuit, Ground fault)	Exia / Exib

2. Types of device

I - Coal mine, II - Factory and industrial use

3. Types of explosive gas

Types of explosive gas	A	B	C
Maximum safety clearance range (Pressure resistance)	0.9mm or more	More than 0.5 mm, Less than 0.9 mm	0.5mm or less
Minimum ignition current ratio (Intrinsic safety)	More than 0.8	More than 0.45 and less than 0.8	Less than 0.45
Applicable device (Pressure resistance, Intrinsic safety, Non-ignition)	IIA	IIB	IIC
Representative gas	Ammonia, Carbon monoxide, Benzene, Acetone, Ethanol methanol, Propane	Butadiene, Ethylene, Diethylether Ethylene oxide, City gas	Acetylene, Hydrogen, Emulsified carbon

4. Maximum Surface Temperature and Temperature rating

Maximum Surface Temperature Range (℃)	Temperature Rating
More than 300 and less than 450	T1
More than 200 and less than 300	T2
More than 135 and less than 200	T3
More than 100 and less than 135	T4
More than 85 and less than 100	T5
Less than 85	T6

5. IP Rating

	First number (Dust)	Second number (Water)		Other symbols (More strict than numbers)
0	No defense	No defense	A	Hand intrusion protection
1	50mm solid (hand) intrusion protection	Vertically falling drops	B	Finger intrusion protection
2	12.5mm solid (finger) intrusion protection	Drops falling down from vertical to 15°	C	Equipment intrusion protection
3	2.5mm solid (instrument) intrusion protection	Drops(rain) falling down from vertical to 60°	D	Wire intrusion protection
4	1mm solid (wire) intrusion protection	(In all directions) splashing water	H	–
5	Dust penetration protection in normal operation	(In all directions) water spout	–	High voltage equipment
6	No dust penetration	(In all directions) Powerful water spout	M	No abnormality in water intrusion during operation
7	–	Waterlogging for a while (user required)	S	No abnormality in water intrusion during non-operation
8	–	Continuous diving (user required)	W	Can be used under any weather conditions

Explosion-proof fire fighting device

*Can be customized besides basic specification

Explosion-Proof Type

LED emergency light (UEP-10)

LED 3W / 60min
Fire fighting product
Ex d ⅡB+H2 T5

Explosion-Proof Type

LED emergency light (UEP-10)

LED 100W / 60min
Ex d ⅡC T5

Fixed temperature sensor
90°, 120° / Ex d ⅡC T6
Explosion-Proof Type

High Temp Sensor
Ex d ⅡC T6

Manual control panel
Ex d ⅡB+H2 T5
Explosion-Proof Type

Combined panel
A, B Type / Ex d ⅡB+H2 T5
Explosion-Proof Type

Guide light
Small, Medium / Ex d ⅡB+H2 T5
Explosion-Proof Type

Electronic siren
Ex d ⅡC T5
Explosion-Proof Type

Warning light
Ex d ⅡC T6
Explosion-Proof Type

Explosion-proof light

*Can be customized besides basic specification

Tank light
Ex d ⅡC T4
Explosion-Proof Type

Light
250W / 175W / Ex d ⅡC T4
Explosion-Proof Type

Light
250W / 175W / Ex nR ⅡT3 IP65
Non-ignition Explosion-Proof Type

Incandescent light
Ex nA Ⅱ T3
Non-ignition Explosion-Proof Type

Incandescent light
Ex d ⅡB+H2 T4
Explosion-Proof Type

Light
400W / Ex d ⅡB+H2 T3
Explosion-Proof Type

Fluorescent light
Ex d ⅡB T4
Explosion-Proof Type

Exposed fluorescent light
Ex nA Ⅱ T3
Non-ignition Explosion-Proof Type

Embedded fluorescent light
Ex nA Ⅱ T3
Non-ignition Explosion-Proof Type

UNIONLIGHT
Emergency Light & System