

Singapore's Leading Emergency Lighting Manufacturer





Established in 1992, Denko Lighting Pte Ltd is an ISO 9001:2015 certified company that specialises in the design, development and manufacture of innovative emergency lighting, exit signs and related products.

As one of Singapore's leading manufacturers in the emergency lighting market, Denko Lighting takes pride in product quality, reliability and innovation of emergency lighting products to meet and exceed the needs of both local and overseas customers.

Denko Lighting's products are listed under the Product Listing Scheme – a safety and product quality certification accredited by Singapore – which bears the mark of excellence as required by international standards. Our quality management system and processes are also ISO 9001:2015 certified, providing customers with confidence and assurance of our products.

On top of delivering customer satisfaction, Denko Lighting is committed to provide and ensure high quality products that dutifully serve the public in times of emergencies and unforeseen circumstances. Denko Lighting is also dedicated on driving continuous business growth through research and development to be economically competitive in the market.

Denko Lighting is also officiated with bizSAFE Level 3, a testament to our Risk Management commitment to Singapore's WSHA initiatives.









MAINTAINED MODE (M)

The lamp is energised during normal conditions from main supply. In the event of mains power failure, the same lamp remains on by automatically switching to the integral battery supply.

NON-MAINTAINED MODE (NM)

The lamp is off during normal mains supply and is automatically energised by the integral battery supply in the event of mains power failure.

COMBINED NON-MAINTAINED MODE (CNM) (FORMERLY KNOWN AS SUSTAINED)

The fitting incorporates both a mains lamp normally on, and a separate battery powered emergency lamp normally off. In the event of mains failure, the emergency lamp is automatically energised.

SYMBOLS



Luminaires suitable for direct mounting on normally flammable surfaces.



Recessed mounted luminaires suitable for mounting on normally flammable surfaces, may not be covered with thermally insulating material.

Class I

Class I luminaire in which protection against electric shock is provided with basic insulation and the connection of accessible conductive parts to the protective (earthing) conductor.



Class II luminaire in which protection against electric shock is provided with both basic insulation and double insulation or reinforced insulation, there being no provision for protective earthing conductor.

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HEALTHCARE/ EDUCATION

Indian International School Middleton International School Mount Alvernia Hospital Nanyang Girl's School Nanyang Technological University Singapore General Hospital Segar Childcare Centre St. Joseph's Institution Jurong Medical Centre

COMMERCIAL/ RETAIL

AEON Mall. Cambodia IKEA Tampines & Alexandra Junction City Yangon, Myanmar **KINEX** One Raffles Place Tanjong Pagar Centre Tesla, Dubai Westgate

RESIDENTIAL

Eight Courtyards Four Seasons Park Fraser Suites, Alexandra Highline Residences Parc Bottania Parc Emily Condominium Sky Terrace Sophia Residences Spottiswoode Suites The Skywoods Various HDB projects

INDUSTRIAL

AMK Techplace II Biopolis DHL Exxon Mobil @ Jurong Island Seagate @ Ayer Rajah The Westcom Toa Payoh Industrial Park

GOVERNMENT

Changi Airport MRT Downtown Line Paya Lebar Airbase SAFRA Punggol Woodlands Police HQ Woodlands and Tuas Checkpoint

HOTEL S

Hotel Grand Central Oasia Hotel Novena Park Regis Hotel Sofitel SG City Centre Studio M Hotel



Tanjong Pagar Centre



Highline Residences



KINEX

IKEA Tampines & Alexandra



SAFRA Punggol

Product Overview

EXIT SIGNS



EmEX 1602M / RM | PG 6

EmEX R1602M / RM | PG 7



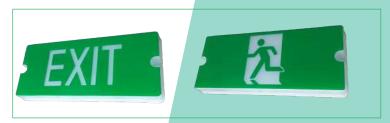
SLED W1201M / RM | PG 8



BLEX W2001M / RM | PG 9



BLEX W2001M / RM RECESSED | PG 10



WLEX 100M / RM | PG 11

EMERGENCY LIGHTS



EmLED-12NM | PG 12 EmLED-14NM | PG 13



EmLED-12NM DRUM EmLED-14NM DRUM | PG 14



EmLED-110NM | PG 15



EmLED-110NM SURFACE | PG 16



EmCEL 12NM / EmCEL 12M / EmCEL 16NM | PG 17



EmDL 203NM / EmDL 205NM | PG 18

EMERGENCY LIGHTS



EmDL 203NM WP | PG 19



LED-11NM | PG 20



LED-11NM AUX | PG 21 LED-13NM AUX



AUX GEM



AUX GEM 2



AUX STAR



CEL 11NM / CEL 11NM WP | PG 22



DL 2301NM & DL 2301NM WP | PG 23



DL 2018NM | PG 24

EMERGENCY CONVERSION KITS



LED1330-M | PG 25

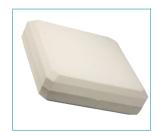


FL 140M-EV58 | PG 26

LUMINAIRES



DENKO SMRI | PG 27



DENKO SMSI | PG 27



DENKO SMRC | PG 28



DENKO SSMRC | PG 28





DENKO SONAR ONE | PG 29 DENKO VISTA SERIES | PG 30



DENKO SUNLITE 18 | PG 31

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X SLIM LED EMERGENCY EXIT SIGN

EmEX 1602M / RM SERIES













EmEX 1602RM-T

Features and Application

- New slim housing LED emergency exit signs with option for Exit or Running Man signage.
- Designed for easy installation and maintenance.
- Optional recess plate and bracket available.
- Samsung LED lamps provide high efficiency, durability and low energy consumption.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

Cable Entry

IP Rating

Legend

Warranty

Maintained

Samsung 2W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent overdischarge of battery

Electro-galvanised steel casing with epoxy powder coating

1.2 kg / 1.4 kg

SS 563-1:2010; SS 563-2:2010/A1:2013;

SS IEC 60598-2-22:2016

Ceiling, wall or pendant mounting

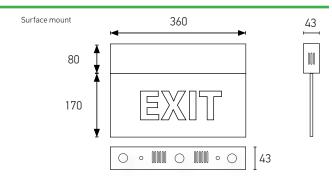
3 x 20mm Ø knockout hole

White text/graphical symbol over ISO

green background

1 year

Dimensions (mm)



Ordering Information

LEGEND

MODEL

| EmEX 1602M | EXIT | EmEX 1602RM | ½ |
|--|------------------------|---|---------------------------------------|
| EmEX 1602M-E | ◆EXIT | EmEX 1602RM-E | ← 🔁 |
| EmEX 1602M-T | EXIT▶ | EmEX 1602RM-T | ₽ |
| EmEX 1602M-D (Double-sided with arrow) | EXIT ▶ (EXIT | EmEX 1602RM-D (Double-sided) | □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ |
| EmEX 1602M-DX (Double-sided without arrow) | EXIT EXIT | EmEX 1602RM-D-AD (Double-sided with arrow down) | となる。 |
| EmEX 1602RM-AD | SY | EmEX 1602RM-D-AU (Double-sided with arrow up) | 公小 |
| EmEX 1602RM-AU | 高小 | EmEX 1602RM-DX (Double-sided without arrow) | <u> </u> |

MODEL

LEGEND



X SLIM LED EMERGENCY EXIT SIGN

EMEX R1602M / RM RECESSED SERIES









Features and Application

- New slim housing LED emergency exit signs with recess plate and bracket.
- Available in Exit or Running Man signage.
- Designed for easy installation and maintenance.
- Samsung LED lamps provide high efficiency, durability and low energy consumption.



EmEX R1602RM

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

Cable Entry

IP Rating

Legend

Warranty

Maintained

Samsung 2W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Electro-galvanised steel casing with

epoxy powder coating

1.5 kg / 1.7 kg

SS 563-1:2010; SS 563-2:2010/A1:2013;

SS IEC 60598-2-22:2016

Recessed mounting

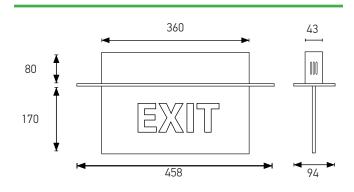
3 x 20mm Ø knockout hole

White text/graphical symbol over ISO

green background

1 year

Dimensions (mm)



| MODEL | LEGEND | MODEL | LEGEND |
|---|------------------------|--|------------|
| EmEX R1602M | EXIT | EmEX R1602RM | 之 |
| EmEX R1602M-E | ◆EXIT | EmEX R1602RM-E | ← 🏖 |
| EmEX R1602M-T | EXIT▶ | EmEX R1602RM-T | ←2 |
| EmEX R1602M-D (Double-sided with arrow) | EXIT ► (EXIT | EmEX R1602RM-D (Double-sided) | S → C2 |
| EmEX R1602M-DX (Double-sided without arrow) | EXIT EXIT | EmEX R1602RM-D-AD (Double-sided with arrow down) | 日本 |
| EmEX R1602RM-AD | SY | EmEX R1602RM-D-AU (Double-sided with arrow up) | 个记 公介 |
| EmEX R1602RM-AU | 八八 | EmEX R1602RM-DX (Double-sided without arrow) | 3 5 |

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WHITE LED EMERGENCY EXIT SIGN

SLED W1201M / RM SERIES











Features and Application

- LED emergency exit signs with option for Exit or Running Man signage.
- Optional recess plate and bracket available.
- LED lamps provide high efficiency, durability and low energy consumption.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

Cable Entry

IP Rating

Legend

Warranty

Maintained

1W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

< 4W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent overdischarge of battery

Electro-galvanised steel casing with epoxy powder coating

2.0 kg / 2.2 kg

SS 563-1:2010; SS 563-2:2010; SS 263-2 (IEC 60598-2-22) /A2:2008

Ceiling, wall or pendant mounting

3 x 20mm Ø knockout hole

IP20

White text/graphical symbol over ISO

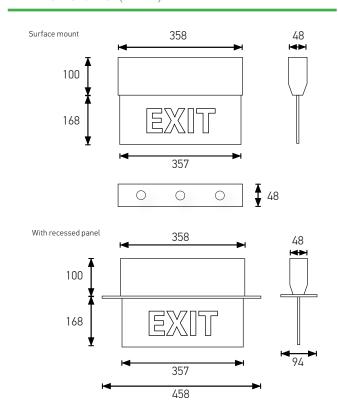
green background

1 year

Options

Recessed panel and bracket

Dimensions (mm)



| oracting information | | | |
|---------------------------------|---------------------|----------------------------------|----------|
| EXIT | LEGEND | RUNNING MAN | LEGEND |
| SLED W1201M | EXIT | SLED W1201RM | 之 |
| SLED W1201M-E | ◆EXIT | SLED W1201RM-E | ←22 |
| SLED W1201M-T | EXIT▶ | SLED W1201RM-T | ₹ |
| SLED W1201M-D (Double-sided) | EXIT ► (EXIT | SLED W1201RM-D (Double-sided) | ☆ |

LED BOX EMERGENCY EXIT SIGN

BLEX W2001M / RM SERIES











Features and Application

- Self contained emergency exit sign encased in a slim box.
- Options for Exit or Running Man signage available.
- Suitable for installation on wall, ceiling or pendant mounting.
- LED lamps provide high efficiency, durability and low energy consumption.



Technical Data

Mode of Operation Maintained 2W Samsung High flux white LED Lamp Operating Temperature ta 0°C ~ 50°C Mains Supply 230V AC 50/60Hz

Power Consumption

High temperature NICD battery Battery

Charger Fully automatic

Ø 5mm green LED Charging Monitor

Recharge Period 24 hours

Testing Facility Test-switch for independent testing

Emergency Duration 3 hours

Low-voltage cut-off to prevent over-Safety Feature

discharge of battery

Electro-galvanised steel casing with Construction

epoxy powder coating

Weight (Nett/Gross) 1.9 kg / 2.1 kg

SS 563-1:2010; SS 563-2:2010/A1:2013; Compliance

SS IEC 60598-2-22:2016

Installation Ceiling, wall or pendant mounting

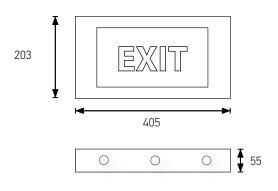
Cable Entry 4 x 20mm Ø knockout hole

White text/graphical symbol over ISO Legend

green background

IP20 IP Rating

Warranty 1 year Dimensions (mm)



Single-sided/double-sided

| EXIT | LEGEND | RUNNING MAN | LEGEND |
|----------------|--------------|----------------|-------------|
| BLEX W2001M | EXIT | BLEX W2001RM | 之 |
| BLEX W2001M-E | ◆EXIT | BLEX W2001RM-E | ← 🖫 |
| BLEX W2001M-T | EXIT▶ | BLEX W2001RM-T | ₹ |
| BLEX W2001M-D | EXIT▶ | BLEX W2001RM-D | <i>1</i> 3→ |
| (Double-sided) | ◆EXIT | (Double-sided) | ← 🔁 |

LED RECESSED BOX EMERGENCY EXIT SIGN

BLEX W2001M / RM RECESSED SERIES











Features and Application

- Self contained emergency exit sign specially designed for recessed wall mounting.
- Options for Exit or Running Man signage available.
- LED lamps provide high efficiency, durability and low energy consumption.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

Cable Entry

Legend

IP Rating

Warranty

Maintained

2W Samsung High flux white LED

ta 0°C ~ 50°C

230V AC 50/60Hz

< 4W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent overdischarge of battery

Electro-galvanised steel casing with

epoxy powder coating

2.5 kg / 2.7 kg

SS 563-1:2010; SS 563-2/A1:2013; SS IEC 60598-2-22:2016

Recessed wall mounting

4 x 20mm Ø knockout hole

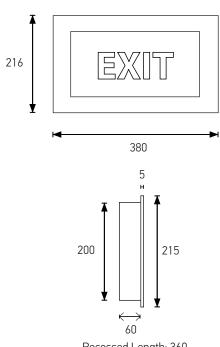
White text/graphical symbol over ISO

green background

IP20

1 year

Dimensions (mm)



Recessed Length: 360

| EXIT | LEGEND | RUNNING MAN | LEGEND |
|---------------------------|--------------|----------------------------|-----------|
| BLEX W2001M Recessed | EXIT | BLEX W2001RM Recessed | 之 |
| BLEX W2001M-E Recessed | ◆EXIT | BLEX W2001RM-E Recessed | ← 🔁 |
| BLEX W2001M-T Recessed | EXIT▶ | BLEX W2001RM-T Recessed | ⋈→ |

WEATHERPROOF EMERGENCY EXIT SIGN

WLEX 100M / RM SERIES









Class I

Features and Application

- IP65 weatherproof self contained emergency exit sign approved and certified by TÜV SÜD PSB.
- Options for Exit or Running Man signage available.
- Ideal for outdoor areas such as dusty, humid and corrosive environments including car parks, loading bays, workshops, laboratories and corridor areas.
- LED lamps provide high efficiency, durability and low energy consumption.



Dimensions (mm)

Technical Data

Mode of Operation

Lamp

2W High flux white LED

Operating Temperature ta 0°C ~ 50°C

Mains Supply 230V AC 50/60Hz

Power Consumption < 4W

Battery High temperature NICD battery

Charger Fully automatic

Charging Monitor Ø 5mm green LED

Recharge Period 24 hours

Testing Facility Test-switch for independent testing

Emergency Duration 3 hours

Safety Feature Low-voltage cut-off to prevent over-

discharge of battery

Construction Injection moulded fire retardant

polycarbonate housing

Weight (Nett/Gross) 1.2 kg / 1.3 kg

SS 563-1:2010; SS 563-2:2010/A1:2013; Compliance

SS IEC 60598-2-22:2016

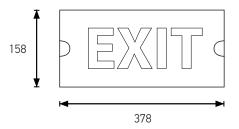
Installation Wall or pendant mounting

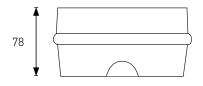
White text/graphical symbol over ISO

green background

IP Rating IP65 rated TÜV SÜD PSB certified

Warranty 1 year





| EXIT | LEGEND | RUNNING MAN | LEGEND |
|-------------|--------------|----------------|------------|
| WLEX 100M | EXIT | WLEX 100RM | 产 |
| WLEX 100M-E | ◆EXIT | WLEX 100RM-E | ←22 |
| WLEX 100M-T | EXIT | WLEX 100RM-T | 5 → |

EASI LED RECESSED EMERGENCY LIGHT

EmLED-12NM

















EmLED-12NM

EmLED-12NM with ring adapter

Features and Application

- New compact all-in-one, self-contained LED emergency light for recessed installation on ceilings designed for easy installation and usage.
- Includes a ring adapter.
- Suitable for various indoor environments such as retail, commercial, hospitality and healthcare industries.
- LED lamps provide high efficiency, durability and low energy consumption.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

IP Rating

Warranty

Non-maintained

Samsung 2W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

< 1W

High temperature NICD battery

Fully automatic

Green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Polycarbonate

0.20 kg / 0.28 kg

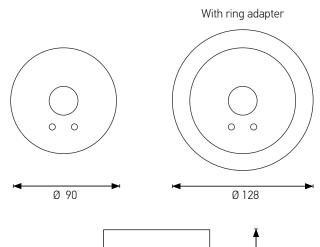
SS 563-2:2010/A1:2013 SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

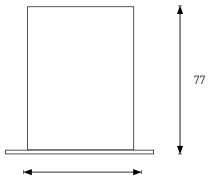
Recessed mount

IP20

1 year

Dimensions (mm)





Opening size: Ø 65

| MODEL | LAMP |
|------------|-----------------------------------|
| EmLED-12NM | Samsung 2W High flux white LED |



EASI LED RECESSED EMERGENCY LIGHT

EmLED-14NM













Features and Application

- New compact all-in-one, self-contained LED emergency light for recessed installation on ceilings designed for easy installation and usage.
- Includes a ring adapter.
- Suitable for various indoor environments such as retail, commercial, hospitality and healthcare industries.
- LED lamps provide high efficiency, durability and low energy consumption.





EmLED-14NM

EmLED-14NM with ring adapter

Technical Data

Mode of Operation Lamp

Operating Temperature

Power Consumption

Mains Supply

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

IP Rating

Warranty

Non-maintained

Samsung 4W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

High temperature NIMH battery

Fully automatic

Green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Polycarbonate

0.28 kg / 0.34 kg

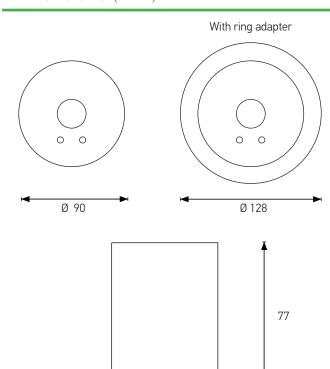
SS 563-2:2010/A1:2013 SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

Recessed mount

IP20

1 year

Dimensions (mm)



Opening size: Ø 65

| MODEL | LAMP |
|------------|-----------------------------------|
| EmLED-14NM | Samsung 4W High flux white LED |

EASI LED SURFACE EMERGENCY LIGHT

EmLED-12NM DRUM / EmLED-14NM DRUM













Features and Application

- New compact all-in-one, self-contained LED emergency light for surface installation on ceilings designed for easy installation and usage.
- Suitable for various indoor environments such as retail, commercial, hospitality and healthcare industries.
- LED lamps provide high efficiency, durability and low energy consumption.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett)

Compliance

Installation

IP Rating

Warranty

Non-maintained

Samsung 2W/4W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

EmLED-12NM DRUM: < 1W EmLED-14NM DRUM: < 2W

High temperature NICD/NIMH battery

Fully automatic

Green LED

24 hours

Test-switch for independent testing

Low-voltage cut-off to prevent over-

discharge of battery

Polycarbonate

EmLED-12NM DRUM: 0.28 kg EmLED-14NM DRUM: 0.36 kg

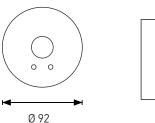
SS 563-2:2010/A1:2013 SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

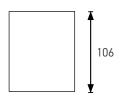
Surface mount

IP20

1 year

Dimensions (mm)





NEW

| MODEL | LAMP |
|-----------------|-----------------------------------|
| EmLED-12NM DRUM | Samsung 2W High flux white LED |
| EmLED-14NM DRUM | Samsung 4W High flux white LED |

VENUS LED 10W RECESSED EMERGENCY LIGHT

EmLED-110NM













Features and Application

- New high lumens self-contained LED emergency light for recessed installation on ceilings designed for easy installation and usage.
- Includes an optional big disc adapter.
- Suitable for various indoor environments such as retail, commercial, hospitality and healthcare industries.
- LED lamps provide high efficiency, durability and low energy consumption.



Technical Data

Mode of Operation Non-maintained

Lamp Samsung 10W High flux white LED

Operating Temperature ta 0°C ~ 50°C

Mains Supply 230V AC 50Hz/60Hz

Power Consumption < 3W

Battery High temperature NIMH battery

Charger Fully automatic

Charging Monitor Green LED

Recharge Period 24 hours

Testing Facility Test-switch for independent testing

Emergency Duration 2 hour.

Construction

Compliance

Safety Feature Low-voltage cut-off to prevent over-

discharge of battery

Disc: Polycarbonate

Control gear: Electro-galvanised

steel casing

Surface: Aluminium casing with

epoxy powder coating

Weight (Nett/Gross)

Disc: 0.1 kg / 0.15 kg

Control gear: 0.52 kg / 0.57 kg

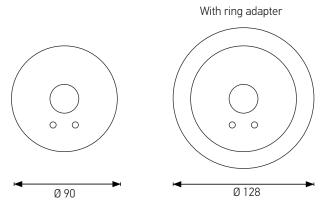
SS 563-2:2010/A1:2013 SS IEC 60598-2-22:2016

SS IEC 60598-1:2016

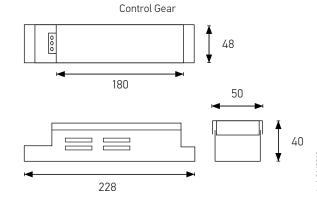
Installation Recessed mount

IP Rating IP20
Warranty 1 year

Dimensions (mm)



Opening size: Ø 65



| MODEL | LAMP |
|-------------|------------------------------------|
| EmLED-110NM | Samsung 10W High flux white LED |

VENUS LED 10W SURFACE EMERGENCY LIGHT

Emled-110NM SURFACE











Features and Application

- New high lumens self-contained LED emergency light for surface installation.
- Suitable for various indoor environments such as retail, commercial, hospitality and healthcare industries.
- LED lamps provide high efficiency, durability and low energy consumption.

Technical Data

Mode of Operation Non-maintained

Samsung 10W High flux white LED

Operating Temperature ta 0°C ~ 50°C

230V AC 50Hz/60Hz Mains Supply

Power Consumption < 3W

Battery High temperature NIMH battery

Fully automatic Charger

Green LED Charging Monitor

Recharge Period 24 hours

Test-switch for independent testing Testing Facility

Emergency Duration

Low-voltage cut-off to prevent over-Safety Feature

discharge of battery

Disc: Polycarbonate Construction

Surface: Aluminium casing with

epoxy powder coating

Weight (Nett/Gross) 0.82 kg / 0.92 kg

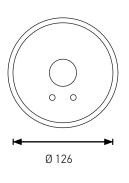
SS 563-2:2010/A1:2013 SS IEC 60598-2-22:2016 Compliance

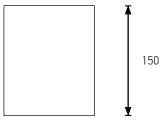
SS IEC 60598-1:2016

Installation Surface mount

IP20 IP Rating Warranty 1 year

Dimensions (mm)





| MODEL | LAMP |
|---------------------|------------------------------------|
| EmLED-110NM SURFACE | Samsung 10W High flux white LED |



NEW IP65 WEATHERPROOF LED COMPACT EMERGENCY LIGHT

EmCEL 12NM / EmCEL 12M / EmCEL 16NM











Features and Application

- Self-contained LED emergency light with new slim and lightweight design.
- Easy installation with optional recess mounting spring clips included.
- LED lamps provide high efficiency, durability and low energy consumption.
- Weatherproof IP65 rated TÜV SÜD PSB certified, ideal for outdoor installations in dusty, humid and corrosive environments including car parks, loading bays, workshops, laboratories and corridor areas.



Technical Data

Mode of Operation Non-maintained / Maintained

Samsung 2W/6W High flux white LED Lamp

Operating Temperature ta 0°C ~ 50°C

230V AC 50Hz/60Hz Mains Supply

EmCEL 12NM: < 1W Power Consumption EmCEL 12M: < 2W

EmCEL 16NM: < 2W

Battery High temperature NICD/NIMH battery

Charger Fully automatic

Green LED Charging Monitor

24 hours Recharge Period

Testing Facility Push button for independent testing

Emergency Duration 3 hours

Low-voltage cut-off to prevent over-Safety Feature

discharge of battery

Injection moulded fire retardant Construction polycarbonate housing with clear

reeded diffuser

Weight (Nett/Gross) 0.55 kg / 0.75 kg

> SS 563-2/A1:2013; SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

Installation Ceiling, wall or recessed mounting

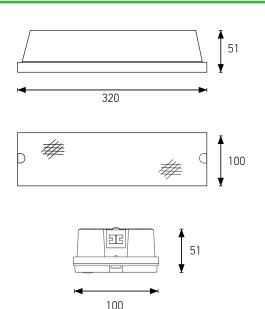
3 x 20mm Ø knockout hole Cable Entry

IP65 rated TÜV SÜD PSB certified * IP Rating

Warranty 1 year

Compliance

Dimensions (mm)



Ordering Information

| MODEL | LAMP | MODE |
|------------|------|----------------|
| EmCEL 12NM | 2W | Non-maintained |
| EmCEL 12M | 2W | Maintained |
| EmCEL 16NM | 6W | Non-maintained |

Remarks

^{*} For Weatherproof (IP65) installation, a cable gland (PG9 to PG13.5) is required for the AC incoming cable entry to ensure IP65 rating.

LED TWIN-FLOOD EMERGENCY LIGHT

EmDL 203NM / EmDL 205NM











Features and Application

- Dual 3W/5W LED self-contained emergency light.
- Adjustable lamp heads to project light in desired position.
- Robust steel housing to provide good protection.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight

Compliance

Installation Cable Entry

IP Rating

Warranty

Non-maintained

Samsung 2 x 3W/5W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

EmDL 203NM: < 2W EmDL 205NM: < 3W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Casing - Electro-galvanised steel casing

with epoxy powder coating Lamphead - High temperature

polycarbonate

EmDL 203NM: 1.55 kg / 1.75 kg EmDL 205NM: 1.7 kg / 1.9 kg

SS 563-2/A1:2013; SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

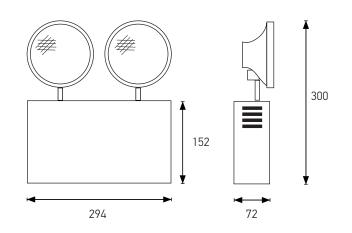
Wall or pendant mounting

1 x 20mm Ø knockout hole

year

IP20

Dimensions (mm)



| MODEL | LAMP |
|------------|---------------------------------------|
| EmDL 203NM | Samsung 2 x 3W High flux white LED |
| EmDL 205NM | Samsung 2 x 5W High flux white LED |

NEW LED TWIN-FLOOD IP65 WEATHERPROOF EMERGENCY LIGHT

EmDL 203NM WP









Features and Application

- Weatherproof housing with dual 3W LED self-contained emergency light.
- Adjustable lamp heads to project light in desired position.
- Robust, fire-retardant and weatherproof polycarbonate housing ideal for outdoor operation.
- Weatherproof IP65 rated TÜV SÜD PSB certified, ideal for outdoor installations in dusty, humid and corrosive environments including car parks, loading bays, workshops, laboratories and corridor areas.



Technical Data

Mode of Operation Non-maintained

Samsung 2 x 3W High flux white LED Lamp

ta 0°C ~ 50°C Operating Temperature

Mains Supply 230V AC 50Hz/60Hz

Power Consumption < 2W

High temperature NICD battery Battery

Charger Fully automatic

Charging Monitor Ø 5mm green LED

Lamp Circuit Continuity Ø 5mm green LED

Monitor

Recharge Period

Testing Facility Test-switch for independent testing

24 hours

Emergency Duration 3 hours

Low-voltage cut-off to prevent over-Safety Feature

discharge of battery

Polycarbonate Construction

Weight (Nett/Gross) 1.8 kg / 2 kg

SS 563-2/A1:2013: Compliance SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

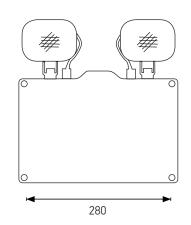
Installation Wall or pendant mounting

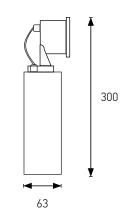
Cable Entry 1 x 20mm Ø knockout hole

IP65 rated TÜV SÜD PSB certified * IP Rating

Warranty 1 year

Dimensions (mm)





Ordering Information

| MODEL | | LAMP |
|--------------|----|---------------------------------------|
| EmDL 203NM \ | WP | Samsung 2 x 3W High flux white LED |

Remarks

^{*} For Weatherproof (IP65) installation, a cable gland (PG9 to PG13.5) is required for the AC incoming cable entry to ensure IP65 rating.

All information subject to change © Denko Lighting Pte Ltd 01/2019

LED RECESSED EMERGENCY LIGHT

LED-11NM















Features and Application

- Self-contained LED emergency light for recessed installation on ceilings.
- Suitable for various indoor environments such as retail, commercial, hospitality and healthcare industries.
- LED lamps provide high efficiency, durability and low energy consumption.
- Comes with option for small or big disc.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

IP Rating

Warranty

Non-maintained

Samsung 2W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Electro-galvanised steel casing; epoxy

powder coating

Control gear - 0.5 kg / 0.55 kg Small disc - 0.1 kg / 0.11 kg Big disc - 0.2 kg / 0.22 kg

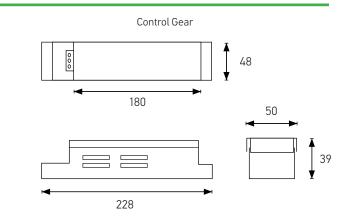
SS 563-2/A1:2013; SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

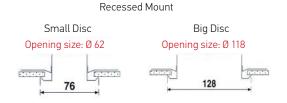
Recessed

IP20

1 year

Dimensions (mm)





| MODEL | LAMP |
|-----------------------|--------------------------------|
| LED-11NM (Small Disc) | 2W Samsung High flux white LED |
| LED-11NM (Big Disc) | 2W Samsung High flux white LED |



LED AUXILIARY EMERGENCY LIGHT

LED-11NM AUX / LED-13NM AUX









Features and Application

- LED stand-alone self-contained emergency light solution for auxiliary installation with various types of light fittings.
- Easy installation with various types of light fittings.
- LED lamps provide high efficiency, durability and low energy consumption.

Non-maintained



Technical Data

Mode of Operation

IP Rating

Warranty

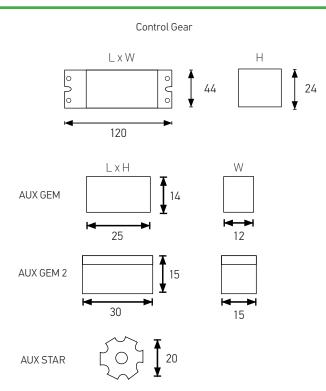
| Lamp | LED-11NM AUX: 2W Samsung High flux white LED LED-13NM AUX: 3W Samsung High flux white LED |
|-----------------------|---|
| Operating Temperature | ta 0°C ~ 50°C |
| Mains Supply | 230V AC 50Hz/60Hz |
| Power Consumption | LED-11NM AUX: < 1W LED-13NM AUX: < 2W |
| Battery | LED-11NM AUX: High temperature NICD battery LED-13NM AUX: High temperature NIMH battery |
| Charger | Fully automatic |
| Charging Monitor | Ø 5mm green LED |
| Recharge Period | 24 hours |
| Testing Facility | Test-switch for independent testing |
| Emergency Duration | 3 hours |
| Safety Feature | Low-voltage cut-off to prevent over- discharge of battery |
| Construction | Control gear - Electro-galvanised steel casing with epoxy powder coating AUX GEM - Aluminium AUX GEM 2 - Polycarbonate AUX STAR - Aluminium based PCB |
| Weight (Nett/Gross) | Control gear - 0.24 kg / 0.29 kg |
| Compliance | SS 563-2/A1:2013; SS IEC 60598-2-22:2016 |

SS IEC 60598-1:2016

IP20

1 year

Dimensions (mm)



| MODEL | LAMP |
|-------------------|--------------------------------|
| LED-11NM AUX GEM | 2W Samsung High flux white LED |
| LED-11NM AUX GEM2 | 2W Samsung High flux white LED |
| LED-11NM AUX STAR | 2W Samsung High flux white LED |
| LED-13NM AUX GEM2 | 3W Samsung High flux white LED |

LED COMPACT EMERGENCY LIGHT

CEL 11NM / CEL 11NM WP











Features and Application

- Self-contained emergency light.
- Easy installation, no additional brackets required.
- LED lamps provide high efficiency, durability and low energy consumption.
- Weatherproof version ideal for outdoor areas such as dusty, humid and corrosive environments including car parks, loading bays, workshops, laboratories and corridor areas.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

Cable Entry

IP Rating

Warranty

Non-maintained

1W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

< 1W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Injection moulded fire retardant housing with clear reeded diffuser

0.8 kg / 0.85 kg

SS 563-2/A1:2013; SS IEC 60598-2-22:2016 SS IEC 60598-1:2016

Ceiling, wall or pendant mounting

Standard 20mm Ø knockout hole

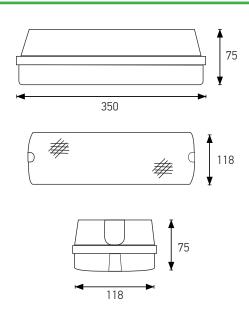
CEL 11NM: IP20

CEL 11NM WP: IP65 rated TÜV SÜD

PSB certified

1 year

Dimensions (mm)



Ordering Information

| MODEL | LAMP |
|-------------|------------------------|
| CEL 11NM | 1W High flux white LED |
| CEL 11NM WP | 1W High flux white LED |

Options

- Standard
- Weatherproof

DECORATIVE LED TWIN-FLOOD EMERGENCY LIGHT

DL 2301NM / DL 2301NM WP











Features and Application

- Self-contained LED dual lamp emergency light.
- LED lamps provide high efficiency, durability and low energy consumption.
- Weatherproof version is housed in a IP65 rated polycarbonate capsule and certified by TÜV SÜD PSB, ideal for outdoor areas such as dusty, humid and corrosive environments including car parks, loading bays, workshops, laboratories and corridor areas.



Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation Cable Entry

IP Rating

Non-maintained

2 x 3W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

< 2W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Casing - Injection moulded fire

retardant polycarbonate

Weatherproof capsule - Polycarbonate

DL 2301NM - 1 kg / 1.1 kg

DL 2301NM WP - 1.7 kg / 2 kg

SS 563-2/A1:2013;

SS IEC 60598-2-22:2016

SS IEC 60598-1:2016

Wall or pendant mounting Standard 20mm Ø knockout hole

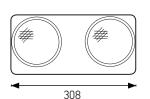
DL 2301NM: IP20

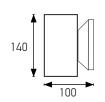
DL 2301NM WP: IP65 rated TÜV SÜD

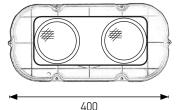
PSB certified

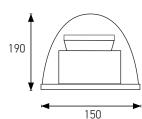
Warranty 1 year

Dimensions (mm)









Ordering Information

| MODEL | LAMP |
|--------------|------------------------|
| DL 2301NM | 3W High flux white LED |
| DL 2301NM WP | 3W High flux white LED |

Options

- Standard
- Weatherproof Capsule

All information subject to change © Denko Lighting Pte Ltd 01/2019

SAFEWAY LED TWIN EMERGENCY LIGHT

DL 2018NM













Features and Application

- Self-contained dual lamp LED emergency light.
- Twin head lamps can be rotated to allow flexible positioning of lights into various directions.
- LED lamps provide high efficiency, durability and low energy consumption.
- Suitable for indoor installations such as staircases, walk ways, carparks, warehouses, etc.

Technical Data

Mode of Operation

Lamp

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Installation

Cable Entry

IP Rating

Warranty

Non-maintained

2 x 3W High flux white LED

ta 0°C ~ 50°C

230V AC 50Hz/60Hz

< 2W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

3 hours

Low-voltage cut-off to prevent over-

discharge of battery

Injection moulded fire retardant

polycarbonate housing

0.8 kg / 1 kg

SS 563-2/A1:2013;

SS IEC 60598-2-22:2016

SS IEC 60598-1:2016

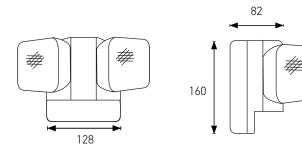
Wall or pendant mounting

Standard 20mm Ø knockout hole

IP20

1 year

Dimensions (mm)



| MODEL | LAMP |
|-----------|----------------------------|
| DL 2018NM | 2 x 3W High flux white LED |

EMERGENCY CONVERSION KIT

LED EMERGENCY CONVERSION KIT

LED1330-M









Features and Application

- Self-contained emergency conversion kit designed to strike various types of LED lamps.
- High efficiency conversion unit providing long backup duration.



Technical Data

Mode of Operation Maintained

Lamp Compatibility LED lamps

Operating Temperature ta 0°C ~ 50°C

Mains Supply 230V AC 50/60Hz, Protection against

polarity reversal

Power Consumption < 3W

Battery High temperature NICD battery

Charger Fully automatic

Charging Monitor Ø 5mm green LED

Recharge Period 24 hrs

Testing Facility Test-switch for independent testing

Emergency Duration 3 hours

Safety Feature Low-voltage cut-off to prevent over-

discharge of battery

Construction Electro-galvanised steel casing with

epoxy powder coating

Weight (Nett/Gross)

Module - 0.25 kg / 0.35 kg

Battery - 0.3 kg

IEC 61347-2-7:2006; IEC 61347-2-13:2006; IEC 62384/A1:2009, SS 563-2:2010

Warranty 1 year

Compliance

Dimensions (mm)







| MODEL | LAMP COMPATIBILITY |
|-----------|--------------------|
| LED1330-M | LED lamps |

All information subject to change © Denko Lighting Pte Ltd 01/2019

COMPACT EMERGENCY CONVERSION KIT

FL140M-EV58











Features and Application

- Designed for use in light fittings with various fluorescent and compact fluorescent lamps.
- Compact size allows for installation in various types and sizes of fittings.
- High efficiency inverter system used to ensure long backup duration.

Technical Data

Mode of Operation

Lamp Compatibility

Operating Temperature

Mains Supply

Power Consumption

Battery

Charger

Charging Monitor

Recharge Period

Testing Facility

Emergency Duration

Safety Feature

Construction

Weight (Nett/Gross)

Compliance

Warrantv

Maintained

4-pin Fluorescent lamp

ta 0°C ~ 50°C

230V AC 50/60Hz

< 3W

High temperature NICD battery

Fully automatic

Ø 5mm green LED

24 hours

Test-switch for independent testing

2 hours

1 year

Low-voltage cut-off to prevent overdischarge of battery

Electro-galvanised steel casing with

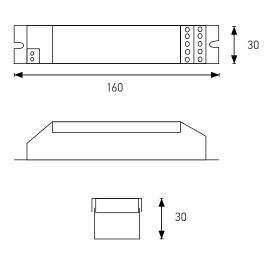
epoxy powder coating

Module - 0.22 kg / 0.32 kg

Battery - 0.35 kg

IEC 61347-2-7:2011; SS 563-2/A1:2013

Dimensions (mm)



| MODEL | LAMP COMPATIBILITY |
|-------------|--|
| FL140M-EV58 | Fluorescent lamp Compact fluorescent lamp |

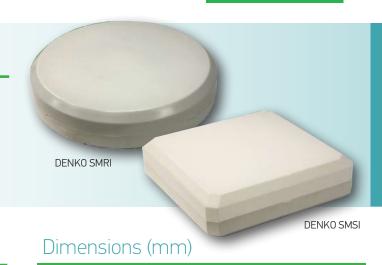
STAIRCASE LUMINAIRES IP65

DENKO SMRI / SMSI SERIES



Features and Application

- IP65 weatherproof, aesthetic and resilient luminaire made of polycarbonate base and PMMA diffuser.
- Ideal for outdoor areas such as dusty, humid and corrosive environments including car parks, loading bays, workshops, laboratories and corridor areas.
- Can be installed with optional High Frequency Electronic Ballast and/or Emergency Power Pack.
- Wall or ceiling mounting.

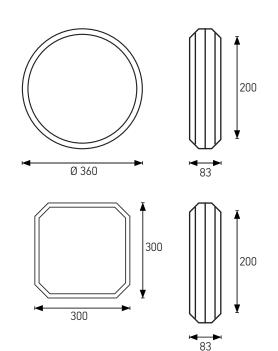


Technical Data

| Housing Material | Polycarbonate base |
|-------------------|-------------------------------------|
| Diffuser Material | PMMA Opal |
| Light Source | PL, PLL, PLS |
| Mains Supply | 230V AC, 50/60Hz |
| Ballast | Magnetic ballast |
| Lampholder | Moulded from Polycarbonate Material |
| Protection | IP65 Rating |

Ordering Information

| MODEL | | LAMB |
|------------------------|------------------|-------------|
| CIRCULAR MODEL | SQUARE MODEL | LAMP |
| DENKO SMRI 2009 | DENKO SMSI 2009 | 2 x PLS 9W |
| DENKO SMRI 2011 | DENKO SMSI 2011 | 2 x PLS 11W |
| W/EMERGENCY POWER PACK | | |
| DENKO SMRI 2009E | DENKO SMSI 2009E | 2 x PLS 9W |
| DENKO SMRI 2011E | DENKO SMSI 2011E | 2 x PLS 11W |



Options

- High Frequency Electronic Ballast
- Emergency Power Pack (Add Suffix "E") e.g. DENKO SMRI 2011E

DECORATIVE STAIRCASE LUMINAIRES

DENKO SMRC / SSMRC SERIES





Features and Application

- Robust and resilient, the Denko SMRC and SSMRC series are decorative luminaires encased in extruded aluminium material.
- Suitable for mounting on walls and ceilings, walkways, corridors and staircase areas.
- Optional high frequency electronic ballast and/or emergency power pack is/are available.

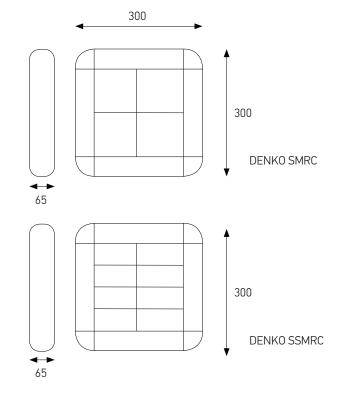
Technical Data

| Housing Material | Extruded aluminium |
|--------------------|--|
| Reflector Material | SMRC - 4 grid matt mirror louvre SSMRC - 8 grid gloss mirror louvre |
| Light Source | PLC and PLC (LED) |
| Mains Supply | 230V AC 50/60Hz |
| Ballast | Magnetic ballast |
| Lampholder | Moulded from Polycarbonate Material |
| Protection | IP20 Rating |

Ordering Information

| MODEL | MODEL W/ EMERGENCY PACK | LAMP |
|------------------|----------------------------|---------------------------|
| DENKO SMRC 218 | DENKO SMRC 218E | 2 x PLC 18W |
| DENKO SSMRC 218 | DENKO SSMRC 218E | 2 x PLC 18W |
| DENKO SMRC 2008 | DENKO SMRC 2008E | 2 x PLC 6W to 8W (LED) |
| DENKO SSMRC 2008 | DENKO SSMRC 2008E | 2 x PLC 6W to 8W (LED) |

Dimensions (mm)



Options

- High frequency electronic ballast.
- Emergency Power Pack (Add Suffix "E") e.g. DENKO SMRC 218E

LED SONAR SENSOR LIGHT

DENKO SONAR ONE SERIES



Features and Application

- Ceiling mounted LED luminaire with microwave sensor for motion detection.
- Elegant brush finish with spin aluminium housing allows excellent heat dissipation and is anodized for corrosion resistance.
- Preset detection zone (1m to Ø10m) to full brightness upon detection. If there is no further detected motion after a preset hold time (5s / 15s / 300s / 600s), the LED lamp will dim into a preset brightness (0% / 5% / 10% / 30% / 50%).
- Suitable for areas with low human traffic while adhering to safety requirements. E.g. Staircases, washrooms, car parks, corridors, walkways, overhead bridges, underpasses, etc.



Technical Data

| Housing Material | Spin aluminium wit | h brush finishing |
|-----------------------------|--------------------|-------------------|
| Mains Supply | 230V AC, 50/60Hz | |
| Model | SONAR ONE 12 | SONAR ONE 15 |
| Wattage (Max) | 12W | 15W |
| Wattage (Econ dimming mode) | 3W | 3W |
| Lumens (lm) | 1336 | 1700 |
| Dimension | 300 x 115 | 350 x 115 |
| LED Lamp Life | 30,000 hours | |
| CCT K | 3000K - 6000K | |

Ordering Information

| MODEL | MODEL W/ EMERGENCY PACK | LAMP |
|--------------------|----------------------------|---------|
| DENKO SONAR ONE 12 | DENKO SONAR ONE 12E | 12W LED |
| DENKO SONAR ONE 15 | DENKO SONAR ONE 15E | 15W LED |

Dimensions (mm)



Options

• Emergency Power Pack (Add Suffix "E") e.g. DENKO SONAR ONE 12E

LED SURFACE MOUNT LUMINAIRE

DENKO VISTA SERIES





Features and Application

- Aesthetically pleasant, resilient and innovative product.
- The product provides simple energy-saving solutions for LED surface mount applications.
- The luminaire body is made of Aluminium powder coated with PC diffuser to allow uniform illumination.
- Suitable for mounting on walls and ceilings, walkways, corridors and staircase areas.

Technical Data

Housing Material Aluminium **PMMA** Diffuser Material

Mains Supply 230V AC, 50/60Hz

Wattage (Max) 15W (Max) / 4W (Dim down) Lumens (lm) 1275lm (15W) / 380lm (4W)

Power Factor ≥0.80

Colour Temperature 2700K - 6500K

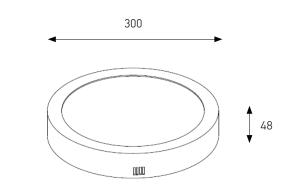
RA ≥80 Colour Rendering

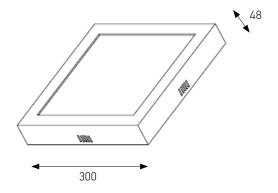
Round: Ø 300 x 48 mm Dimension

Square: 300 x 300 x 48 mm

IP Rating

Dimensions (mm)





| MODEL | DESCRIPTION |
|-------------------------------------|--|
| DENKO VISTA ROUND | 15W LED |
| DENKO VISTA SQ | 15W LED |
| With Emergency Power Pack | Add on suffix 'E' - i.e. DENKO VISTA ROUND E |
| With Motion Sensor | Add on suffix 'MS' - i.e. DENKO VISTA ROUND MS |
| With Powerpack and Motion Sensor | Add on suffix 'EMS' - i.e. DENKO VISTA ROUND EMS |

LED SURFACE MOUNT LUMINAIRE

DENKO SUNLITE 18 SERIES



Features and Application

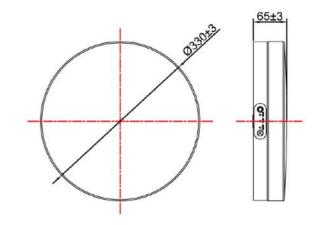
- Aesthetically pleasant, resilient and innovative product.
- The product provides simple energy-saving solutions for LED surface mount applications.
- The luminaire body is made of ABS base with PMMA diffuser to allow uniform illumination.
- Suitable for mounting on walls and staircase ceiling applications.



Technical Data

| Housing Material | ABS |
|--------------------|---------------------------|
| Diffuser Material | PMMA Opal Polycarbonate |
| Light Source | LED SMD 2835 |
| Mains Supply | 230V AC, 50/60Hz |
| Wattage (Max) | 18W (Max) / 4W (Dim down) |
| Lumens (lm) | 1530lm (18W) / 416lm (5W) |
| Power Factor | ≥0.80 |
| Colour Temperature | 2700K – 6500K |
| Colour Rendering | RA ≥80 |
| Dimension | Ø 330 x 65 mm |
| IP Rating | IP 44 |

Dimensions (mm)



| MODEL | DESCRIPTION |
|-------------------------------------|--|
| DENKO SUNLITE 18 | 18W LED |
| With Emergency Power Pack | Add on suffix 'E' - i.e. DENKO SUNLITE 18E |
| With Motion Sensor | Add on suffix 'MS' - i.e. DENKO SUNLITE 18MS |
| With Powerpack and Motion Sensor | Add on suffix 'EMS' - i.e. DENKO SUNLITE 18EMS |

