

## LED miniature downlights

# LDI3/18 Range

The **LDI3/18** is a small and very discreet LED light pod with an injection moulded thermally conductive plastic body acting as a very effective heat sink and incorporating an 18mm thread and lock nut for simple installation.  
**(NB: Requires 18.5mm clearance hole with access to the rear).**

The **LDI3/18** light pods (silver or white front bezel) offer two distribution types.

### LDI3/18/105 (WIDE BEAM)

The **LDI3/18/105** light pod offers 105 degree wide angle lens configuration ideal for illumination of open areas with mounting heights below 3.5m.

### LDI3/18/C ('CORRIDOR' BEAM)

The **LDI3/18/C** light pod offers a dissymmetric lens providing a narrow beam across the width of a corridor and extremely wide (batwing) distribution along the length of the corridor.

For emergency lighting applications the **LDI3/18** light pods incorporate an integral green/red bi-colour indicator suitable for standard emergency or Self-Test/DALI emergency.



LDI3/18/C ('Corridor' beam)



LDI3/18/105/WH



LDI3/18/105/SL



LDI3/18/C/WH

### Typical Emergency Lighting Spacings

Mounting height Hm (m)	LDI3/18/105 @ 350mA		LDI3/18C @ 350mA	
	Spacing (m) min 0.5Lux open area	Spacing (m) min 1Lux escape	Spacing (m) min 0.5Lux open area	Spacing (m) min 1Lux escape
2.0	6.6	6.8	n/a	9.3
2.5	7.2	7.4	n/a	10.6
3.0	7.6	7.9	n/a	11.7
3.5	8.2	8.4	n/a	12.7

**NB:** Performance relative to the chosen driver — 350mA (preferred), 500mA or 700mA (maximum)  
Full photometry (LDT files) are available for each output.

### ORDER CODES

### Description

<b>LDI3/18/105/WH</b>	LDI3/18 – Wide beam; White body
<b>LDI3/18/C/WH</b>	LDI3/18 – Corridor lens; White body

Suffix for Options:

<b>/SL</b> (instead of /WH)	Silver body
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## LED miniature downlights

### LDE3F Range

Where projects require the advantages of low energy/long life LEDs packaged in standard downlight products for plasterboard ceilings and ceiling tiles the **LDE3F** range is the ideal choice. The **LDE3F** downlights (white or black thermally conductive plastic) are installed using spring clips into a 45mm diameter cut-out.

#### LDE3F/WIDE (WIDE BEAM)

The **LDE3F/WIDE** downlight offers a Wide beam (160 degree) lens configuration ideal for illumination of open areas with mounting heights of typically 2 to 5m.

#### LDE3F/C ('CORRIDOR' BEAM)

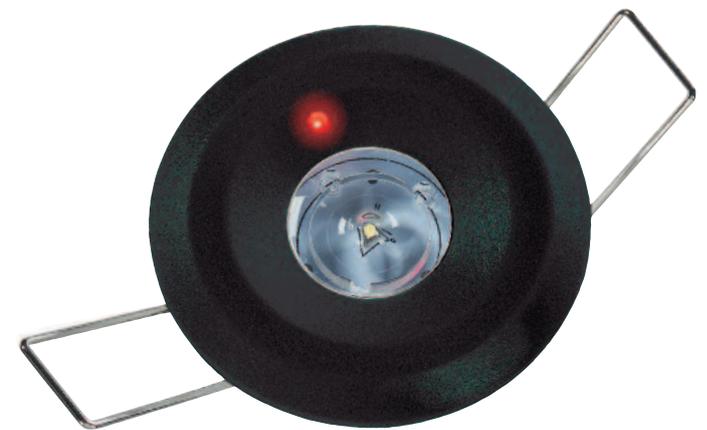
The **LDE3F/C** downlight offers a dissymmetric lens providing a narrow beam across the width of a corridor and extremely wide (batwing) distribution along the length of the corridor.

#### LDE3F/HL (HIGH LEVEL / MEDIUM BEAM)

The **LDE3F/HL** downlight offers a medium beam ideal for higher mounting heights of typically 4 to 12m or lighting high risk tasks. **NB:** for best results the 'HL' lens should be operated from a 500mA or 700mA kit or power supply. Full .LDT photometry files are available upon request.



LDE3F/WIDE/WH White Downlight



LDE3F/WIDE/BL Black Downlight (DALI red 'fault' indication)

### Typical Emergency Lighting Spacings

Mounting height Hm (m)	LDE3F/WIDE @ 350mA		LDE3F/C @ 350mA		LDE3F/HL @ 350mA		LDE3F/HL @ 700mA	
	Spacing (m) min 0.5Lux open area	Spacing (m) min 1Lux escape	Spacing (m) min 0.5Lux open area	Spacing (m) min 1Lux escape	Spacing (m) min 0.5Lux open area	Spacing (m) min 1Lux escape	Spacing (m) min 0.5Lux open areas	Spacing (m) min 1Lux escape
2.0	10.0	8.9	n/a	11.9	n/a	n/a	n/a	n/a
2.5	9.6	8.2	n/a	12.9	n/a	n/a	n/a	n/a
3.0	9.0	7.5	n/a	13.1	n/a	n/a	n/a	n/a
3.5	8.5	6.8	n/a	13.4	n/a	n/a	n/a	n/a
4.0	7.9	4.8	n/a	13.4	n/a	n/a	4.4	5.0
6.0	n/a	4.5	n/a	12.2	5.8	n/a	6.1	6.9
8.0	n/a	n/a	n/a	7.9	7.3	n/a	7.8	8.7
10.0	n/a	n/a	n/a	n/a	8.5	n/a	9.3	10.2
12.0	n/a	n/a	n/a	n/a	9.6	n/a	10.8	12.0

**NB:** Full .LDT photometry files available upon request

**Notes** 10.76Lux achieved at:

LDE3F/HL @ 350mA Hm = 4.0m      LDE3F/HL @ 700mA Hm = 6.0m

#### ORDER CODES

**LDE3F/WIDE/WH**

Recessed miniature downlight with Wide beam lens; White body

**LDE3F/C/WH**

Recessed miniature downlight with Corridor beam lens; White body

**LDE3F/HL/WF**

Recessed miniature downlight with High Level (medium) beam lens; White body

Suffix for Options:

**/BL** (instead of /WH)

Black body

# LED miniature downlights

## GENERAL SPECIFICATION

	LDI3/18	LDE3F
Light source	Nichia white LED	
Colour temperature	4500K	
Luminaire lumens (mains)	150lm @ 350mA	160lm @ 350mA
IP rating	IP63	
Ambient temperature (Ta)	0 to 40°C	
Insulation class	Class II	
Supply voltage	230V ~ 50Hz	
Cut-out	18.5mm dia.	45mm dia.

## Available Power Supply Solutions

### Built-in Conversions

#### LDCK425 NON-MAINTAINED 425mA MINIATURE KIT.

*Ideal for LDI3/18 light pod*

Driver/charger module and 2.4Volt (2-cell) 3Ah C NiCd battery pack for 3 hour operation of 3Watt LED light pods. Battery is connected by a PCB mounted plug.

Module dimensions:-

130mm (L) x 28mm (W) x 21mm (H) *(same module dimensions for 'HL' versions)*

Battery dimensions 425mA version:- Single stick @ 100mm (L) x 25mm (dia.)

Battery dimensions 'HL' 700mA version:- Two sticks @ 100mm (L) x 25mm (dia.)

NiCd batteries can withstand continuous temperatures of 55°C.

#### LDI3/18

Ideal for building into luminaires with the LDCK425 to provide 'combined' emergency conversions

#### LDCK425

425mA version

### Remote Conversions

#### LDCK330/40 NON-MAINTAINED 350mA 'SAUSAGE PACK'

Designed specifically to pass through the cut-outs for the LDE3F downlights the LDCK330/40 non-maintained 'sausage pack' offers a one-piece housing for the driver and high temperature Nickel Cadmium battery.

To ensure simple installation these units comprise a contractor friendly mains connector and the necessary LED connector for operation of ELP LDE3F downlights and LDI3/18 light pods.

LDCK330/40 self-contained pack  
Shown with LDE3F/C LED downlight

### Self-Test and DALI options

#### LM MAINTAINED KIT

*(available with 350mA; 500mA or 700mA outputs)*

Driver/charger module and appropriate 'plug-in' battery supplied in a protective tube providing 3 hour emergency operation of 3Watt LED light pods with automatic self-test or fully interoperable DALI when connected to a suitable DALI system.

Module dimensions:-

178mm (L) x 30mm (W) x 21mm (H)

#### LM maintained kit

Shown with LDE3F/C downlight

### Mains and Central Power supply options

#### LDPSU230 MAINS VOLTAGE DRIVERS

350mA, 500mA and 700mA drivers for low power LEDs.

**Notes:** Suitable for 110Volt AC/DC and up to 230Volt supplies.

'A', 'H' & 'E' case types offer different size and terminal options.



LLDPSU230H 230Volt driver  
95mm (L) x 33mm (W) x 20mm (H)



LLDPSU230A 230Volt driver  
45mm (L) x 45mm (W) x 20mm (H)



LDPSU230E 110v 230Volt driver  
88mm (L) x 38mm (W) x 22mm (H)

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LDI3 and LDE3F DS-08-20

