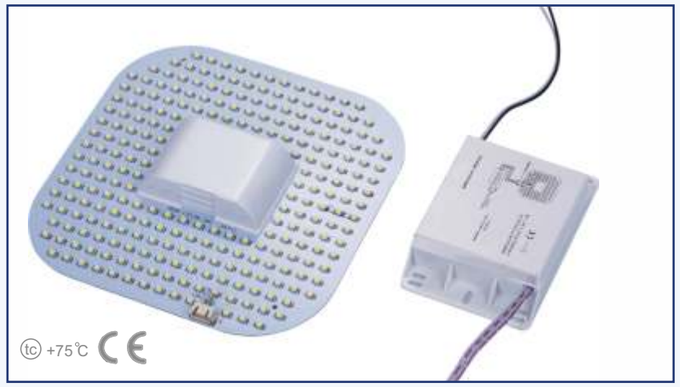
EMERGENCY BACK-UP

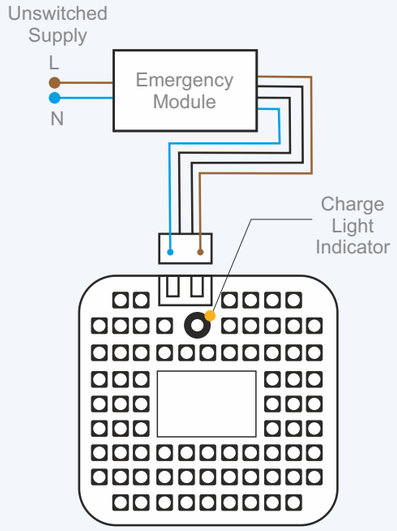
The Astrid 2D LedLamp is designed to operate with emergency back-up in the event of mains power failure. The emergency module and battery pack are enclosed within a bespoke housing that interfaces with the PCB with a dedicated plug-in connector lead. Mains input to be by way of unswitched live supply to maintain the battery charging in the event the switched supply is turned off. Should the MP2D mounting plate be used, there are fixing points to locate the emergency housing unit in place. When ordering suffix model code “EM3”

- Green LED charge light displayed on PCB. When illuminated this identifies the batteries are charging
- Charge the battery for a minimum 24 hours before first use
- If the Green LED is not illuminated then there may be mains supply failure, the battery pack has not been connected, or the internal circuit may have failed
- The EM3 battery pack is designed to operate for a duration of minimum 3 hours

Astrid 2D LedLamp-SD with Emergency Module



3 hours duration with Li Battery Pack 2.2A 7.4V



MP2D - MOUNTING PLATE

The Astrid 2D LedLamp is designed to fit the 4 Pin lamp base into the GR10-q 2D compact lamp style holder and can be retrofitted into most luminaires; however should there be a requirement to change the existing lamp-holders, this can be upgraded with the MP2D Mounting Plate that combines lamp holder plus an extended flange to mechanically attach the emergency module, if required.

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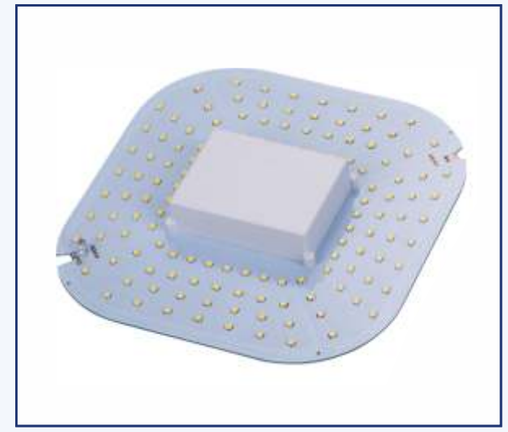
ASTRID 2D LEDLAMP

Astrid 2D LedLamp is an LED Lamp, designed as a retrofit replacement for 2D Compact Fluorescent Lamps

The Astrid 2D LedLamp has been specifically developed as an LED retrofit option to replace the commonly used 28W 2D compact fluorescent lamp. The design is such that it also has applications for installation into new luminaires at time of manufacture and can be supplied with a bespoke mounting bracket, incorporating lamp holder and terminal block, making it universal to fit most styles of circular lighting fixtures that are suitable for this type of lamp. Whilst energy efficient in its own right as an LED lamp system, the Astrid 2D LedLamp offers not only fixed output but also microwave sensor controlled models for occupancy control, either for “On/Off” switching or “Dimming” to minimum output when unoccupied, providing background comfort light.

FEATURES

- High output LED technology
- Designed as a retrofit replacement for 28W or 38W 2D Compact Fluorescent Lamps
- Energy Savings of up to 60% when compared with 2D lamps
- Available with “On/Off” and Dimming Systems for occupancy control via integral microwave sensor, providing enhance savings of up to 90%
- Option for integral 3 hour emergency pack – suffix model code with EM3
- Easy to install
- Option of bespoke mounting bracket if required
- Warranty 5 years at time of registering
- CE Certified



APPLICATIONS

- Commercial Buildings
- Corridor/Lobby Lighting
- Stairwell Lighting
- 2D Bulkhead Lighting

TECHNICAL DETAIL

Model Types:	Astrid 2D LedLamp – Fixed Output Astrid 2D LedLamp-SD – with microwave sensor detection, providing “On/Off” and “Dimming” occupancy control
Emergency Option:	When supplied with emergency battery back-up suffix model code “EM3”
Lamp Holder Base:	4 Pin to fit to GR10-q 2D compact lamp style holder
Light source:	32 x SMD2835 LEDs
Luminous Flux:	1440 lm (note based on full frontal output with no back light loss)
Comparison to CFL:	Suitable for replacement of 2D compact fluorescent lamps
Power Consumption:	16 watts
Rated Voltage:	Input - 230~240VAC - 50/60Hz - Output – 24V DC
Operating Temperature:	-20°C to + 60°C
TC:	75°C
TA:	50°C
Colour Temperature:	Cool White: 5500-6700K, Natural White: 4000-5000K, Warm White: 2700-3500K
Measurement:	88mm x 188mm
Life:	50,000 hours
Certification:	CE - RoHS

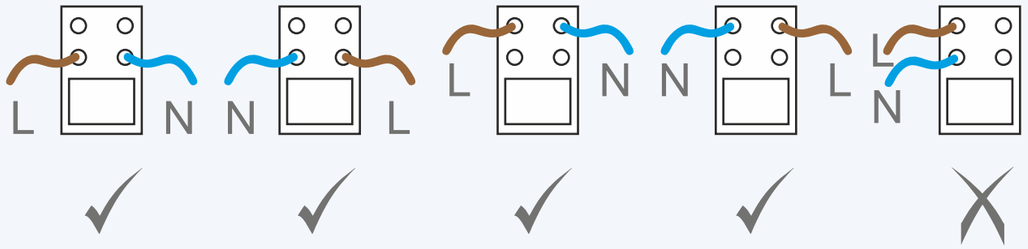
All electrical installation work should be carried out by a qualified electrician. Morgan Hope reserves the right to change specification details of all products without prior notification. Always ensure the fitting is fully earthed

Talk to us today and start to
Lower Your Energy Bills and Reduce your Carbon Footprint

INSTALLATION DETAILS:

Prior to any installation, the existing fitting must be switched off and isolated at the mains.

- Power off, access luminaire and remove existing 2D fluorescent lamp.
- Remove existing ballast and wire to the lamp-holder direct from mains supply as shown in the diagram below. Alternatively if the Morgan Hope MP2D mounting plate is to be used, then remove existing lamp-holder completely and fix the MP2D plate with self-tapping screws centrally into back of the luminaire and connect mains supply into the terminal block.
- Push the Astrid 2D LedLamp into the lamp-holder and refit the diffuser.
- Power “On” to operate.



OPERATION FOR SENSOR DETECTION

The Astrid 2D LedLamp-SD is supplied with an integral microwave sensor for operation via occupancy detection. Its unique design offers multiple control options from “On/Off” switching to a range of dimming levels. The installation method is as highlighted in “Installation Details” and the sensor control operates within the following parameters:

- Lamp Operation Time-out: The Astrid LedLamp 2D has two modes of time control and the Lamp Operation Time-out relates to the final switching of the lamp after the “Control Time-out” has taken place. When set at 24h setting the lamp will operate as per the Stand-by dimming options – e.g. 0% will relate to “On/Off” switching – 10% will remain at 10% when there is no movement etc. However when set at any of the timed settings of – 1 Min - 30 Min – 60 Min, then from the point of last detection, the 10% dim mode will stay at 10% for the period set and when this is reached will switch “Off”. This same principle also relates to the other % settings.
- Stand-by dimming options: 0% - 10% - 20% - 30%
- Control Time-out: 10sec - 1 min – 5 min – 10 min
- Detection Range (radii): 3m – 5m – 8m – 10m
- Daylight Detection: - 10lux – 30lux – 50lux – 2000lux (Day) - (due to the reflective inconsistences from various diffuser types the daylight detection can invariably be distorted and as such should be by-passed by setting at the 2000 lux option)

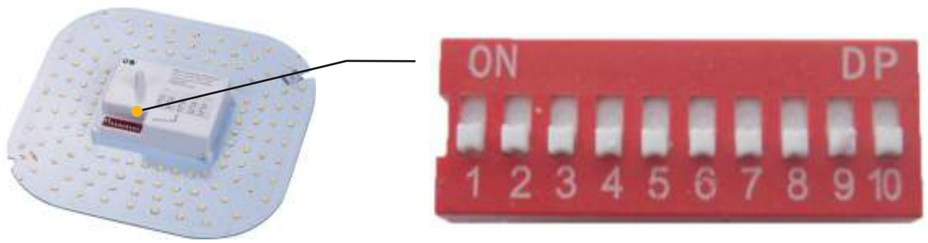
Note: Whilst the above and following provides the various setting options, these may change from time to time; however the details are always printed on the front of the Microwave Sensor.

SETTING INSTRUCTIONS

Within the Microwave Sensor housing there is a DIP Switch panel to enable manual setting of each of the operational functions of the Sensor. These are not set to any specifics and need to be set at time of installation to the particular site requirements. Within the following Setting Instructions the DIP Switch positions are shown for the choice of settings required with the “On” position Up and “Off” position Down, noting that in the Settings section “0” refers to “Off” and “1” refers to “On”.

The below picture shows the 10 x DIP Switches from S1 through to S10, based on the setting positions of: S1, S2 = Detection Range - S3, S4 = Control Time-out - S5, S6 = Daylight Detection - S7, S8 = Stand-by dimming options - S9, S10 = Lamp Operation Time-out

Note: All Sensor functions can be adjusted whilst lamp is operating.



LAMP OPERATION TIME-OUT SETTINGS:

Operates in conjunction with settings designated in all “Setting Modes” and switches the lamp off, when the set time is reached, after the point of last detection i.e. *24 hours = continuous operation – *1Min = switches off after 1 minute from last detection - *30Min = switches off after 30 minutes from last detection - *60Min = switches off after 60 minutes from last detection: The table shows Dip Switch “On” as 1 and “Off” as 0, allowing various lamp operation time-out settings:

S9	S10	Lamp operation Time-out	S9	S10	Lamp operation Time-out
0	0	24Hr 1 0 30Min	1	0	30Min
0	1	1Min 1 1 60Min	1	1	60Min

Note: When the lamp switches “Off”, there is approximately a 1 second delay before reactivating.

STAND-BY DIMMING OPTION SETTINGS:

The table shows Dip Switch “On” as 1 and “Off” as 0, allowing various dimming options. For “On/Off” switching only choose 0%. For background comfort light choose one of the percentage dimming levels:

S7	S8	Dimming Option	S7	S8	Dimming Option
0	0	0%	1	0	20%
0	1	10%	1	1	30%

Note: When the lamp switches “Off”, there is approximately a 1 second delay before reactivating.

CONTROL TIME-OUT:

Time-out can be set from 10s to 10min, which commences from last point of movement detection. The table shows Dip Switch “On” as 1 and “Off” as 0, allowing various Control Time-out options:

S3	S4	Time Out	S3	S4	Time Out
0	0	10Sec	1	0	5Min
0	1	1Min	1	1	10Min

DETECTION RANGE (RADII):

The Detection Range shown in the table relates to the radii of the detection zone, produced at ground level, after positioning the Sensor at an example of 2.5m mounting height. The table shows Dip Switch “On” as 1 and “Off” as 0, allowing various detection ranges to be set:

S1	S2	Detection Range	S1	S2	Detection Range
0	0	2m	1	0	8m
0	1	5m	1	1	10m

DAYLIGHT DETECTION:

The daylight options incorporated within Sensor functions have limitations of operation dependent upon the luminaire housing and diffuser into which the lamp is fitted. Reflection from the lamp can create distortion within the photocell function and as such whilst this option is available, only on-site testing will determine such operational values. To by-pass the function of the photocell, to avoid nuisance switching, the settings should be based on the 2000 lux value. The table shows Dip Switch “On” as 1 and “Off” as 0 for setting the various lux levels:

S5	S6	Lux Level	S1	S2	Lux Level
0	0	2000 Lux (Day)	1	0	30 Lux
0	1	10 Lux	1	1	50 Lux