LED LIGHTING

HPM

A brand of **legrand**

BRIGHT
STYLISH
EFFICIENT

2018 - EDITION 5

CONTENTS

LED LIGHTING EXPLAINED

HPM

LIGHT COLOUR

Expressed in Degrees Kelvin (K), light colours are the key to determining the mood of a room.

WARM WHITE	DEGREES	2700-3000K
	DESCRIPTION	**SOFTER, WARMER LIGHT** Comparable to traditional incandescent lighting. Preferred in cooler climates
	ROOM	Bedroom, living room, bathroom, kitchen

COOL WHITE	DEGREES	4000K
	DESCRIPTION	**NEUTRAL LIGHT** Used for task lighting and preferred in warmer, tropical climates
	ROOM	Laundry, garage, study, bathroom, kitchen

AVERAGE LAMP LIFE

LED 30,000 HOURS	COMPACT FLUORESCENT 10,000 HOURS	INCANDESCENT 1,000 HOURS

DURABILITY: LEDs are very long-lasting compared to other lighting technologies, with an average 30,000 hours life expectancy. We use quality components which make our lamps even more durable, being laboratory tested and assessed at 30,000 hours life expectancy. That represents approximately 20 years based on 3 to 4 hours usage per day.

DIMMING COMPATIBILITY

Critical to a successful installation is an understanding of LED compatibility with dimmers.

HPM is one of the only major brands on the market to deliver a full solution from dimmers to drivers and LED fixtures. Choose the winning combination of HPM LED fixtures and HPM or Legrand dimmers to ensure superior performance – including smooth dimming with no flickering, reliability and long life.

HPM LED fixtures + HPM & Legrand dimmers p.69-70 = SUPERIOR DIMMING

LIGHT PERFORMANCE

LIGHT OUTPUT	INCANDESCENT	HALOGEN	CFL	LED
220 lm	25W	18W	5-7W	3W
420 lm	40W	28W	7-8W	4-5W
720 lm	60W	42W	11-12W	6-8W
930 lm	75W	52W	13-18W	9-13W
1300 lm	100W	70W	18-23W	16-20W

LUMINOUS EFFICACY (lm/W)

Picking a lamp fixture based only on wattage or physical size could result in the wrong choice: Wattage (measured in W) represents the power consumed by the luminaire. The actual output of a lamp is measured in lumens (lm): the more lumens, the more light emitted by the luminaire. A smart criteria for determining the efficiency of a light fixture is its lumens/Watt ratio, which represents how much light the fixture delivers versus what it consumes to perform. This value is called luminous efficacy, and proves LED lights are more efficient than other light technologies.

COLOUR RENDERING INDEX (CRI)

CRI measures how well a lamp makes colours appear. CRI scores light sources from 1 – 100: a high CRI means that the eye can pick up slight variations in colour, making details in an interior appear sharper and more vibrant. For outstanding colour rendering, opt for our Dalia series which boasts a very high 92 index.

Our downlights range from 80 to 92, to enhance skin tones, hues and textures in rooms.

BEAM ANGLE

The light effect from a luminaire is determined by its beam angle, That is the shape and direction of light generated by the lamp. Most conventional fixtures deliver a focused light distribution at 35-60° beam angle, but LED technology can go well above those values, while still maintaining a fair pool of light.

Our lights deliver beam angles ranging from 80 to 120° to ensure a beautiful light is spread throughout a room.

OUR QUALITY PROMISE

DIMMING COMPATIBILITY
Many of our lights are capable of being dimmed effectively. For optimum dimming performance and to reduce flickering, use HPM or Legrand dimmers. See pages 102-103 for more details.

INSULATION RATING
All recessed luminaires included in this brochure have an insulation rating of IC, IC-F, IC-4, CA80 and CA90. This means insulation may abut or cover the LED luminaire.

NATA ACCREDITED LABORATORY
To ensure the highest possible quality assurance standards all HPM lighting fixtures and lamps are tested in our NATA accredited laboratory in Sydney.

IP RATING
All our products are assured against insects and moisture, with IP ratings ranging from IP42 to IP65. See IP chart on page 105 for more information.

LED GARDEN LIGHTING 12V

LED GARDEN LIGHTING BENEFITS

When installing LED lights, you do not need to use a transformer with a high wattage rating. If you have chosen lights that aren't available in a kit form (i.e including a transformer or a cable), a HPM LED lighting installation pack is ideal for your needs.

When you reduce your overall energy consumption, you significantly increase the total number of lights you can add to your transformer. This makes it easier to install more lights when you wish to update the look of your garden.

It is important to choose a transformer that is suitable for your lighting system – refer transformer selection chart page (158-159).

HPM Garden lighting products pair nicely with:

EXCEL LIFE WEATHERPROOF SWITCHES

AQUA SWITCHES

SIMPLE 3 STEP GARDEN LIGHT CONFIGURATION

DIY STEP 1

CHOOSE YOUR LIGHTS

Mix & match styles. You can add LED and halogen lights on the same cable

DIY STEP 2

CHOOSE A TRANSFORMER*

Add up the wattage of the lights you have selected, then choose a transformer with a wattage higher than the total wattage of your lights
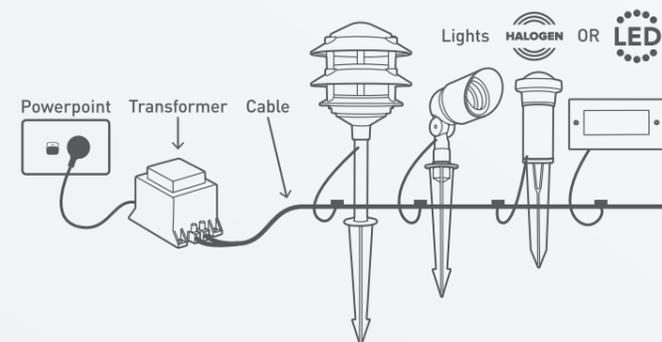
DIY STEP 3

CHOOSE A CABLE

The selection chart on the HPM cable range packaging will help you determine the best cable for your installation

INSTALLATION EXAMPLE

Lights HALOGEN OR LED

Powerpoint Transformer Cable

*IMPORTANT:

• For a 60VA transformer you can use up to 60W of halogen lamps or 30W of LED lamps.

• If mixing halogen and LED globes then follow equation below to determine the right size transformer:
(Number of LED globes × wattage × 2)
+ (Number of halogen globes × wattage)
= total wattage of required transformer

• Always choose a transformer of higher rating than the total load of all lights put together.

DIY
STEP 1

GARDEN SPIKE LED SPOTLIGHT (12V)

A stunning spotlight made from 304 grade stainless steel – which means it's quality, not a painted fakey. Use it to highlight your garden gems. Day or night, it will flaunt your eye for style.

Power	1W
Nominal voltage	12V
Globe type	LED
Construction	Solid 304 grade Stainless Steel
Package contents	1 x light fixtures with 0.3m cable and connector
Requires	12V transformer and cable (not included in pack and sold separately)
Weight	0.5kg
Adjustable head	Yes
Product code	Silver Finish **GLLEDSLSS**
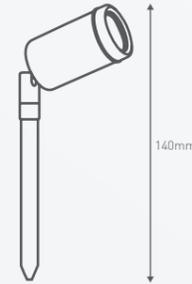
1 WATT

SOLID 304 GRADE STAINLESS STEEL

1 YEAR WARRANTY

140mm

GARDEN SPOT LED SPOTLIGHT (12V)

HPM

This is another great spotlight for the eco-conscious. And rather handsome too. We wonder what you'll be spotlighting: a favourite shrub, a mosaic feature wall, or secret reading nook.

|	
Power	1W
Nominal voltage	12V
Globe type	LED
Construction	Black die-cast housing
Package contents	1 x Light fixture with 0.3m cable and connector 1 x Durable plastic stake
Requires	12V transformer and cable (not included in pack and sold separately)
Weight	0.320kg
Adjustable head	Yes
Product code	Black Finish **GLLEDSLBL**

1 WATT

1 YEAR WARRANTY

100mm
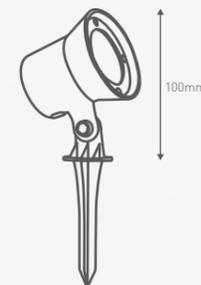
GARDEN CONE LED SPOTLIGHT (12V)

We love the cone shaped head on this spotlight. It has a distinctive character and consumes surprisingly little energy. Our stylish, eco-conscious friends, this is one for you.

Power	1W
Nominal voltage	12V
Globe type	LED
Construction	Black die-cast housing
Package contents	1 x Light fixture with 0.3m cable and connector 1 x Durable plastic stake
Requires	12V transformer and cable (not included in pack and sold separately)
Adjustable head	Yes
Product code	Black Finish RGLLSP1M2

1 WATT

1 YEAR WARRANTY

86mm
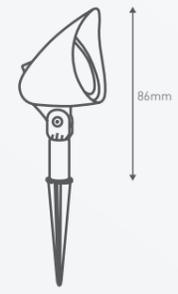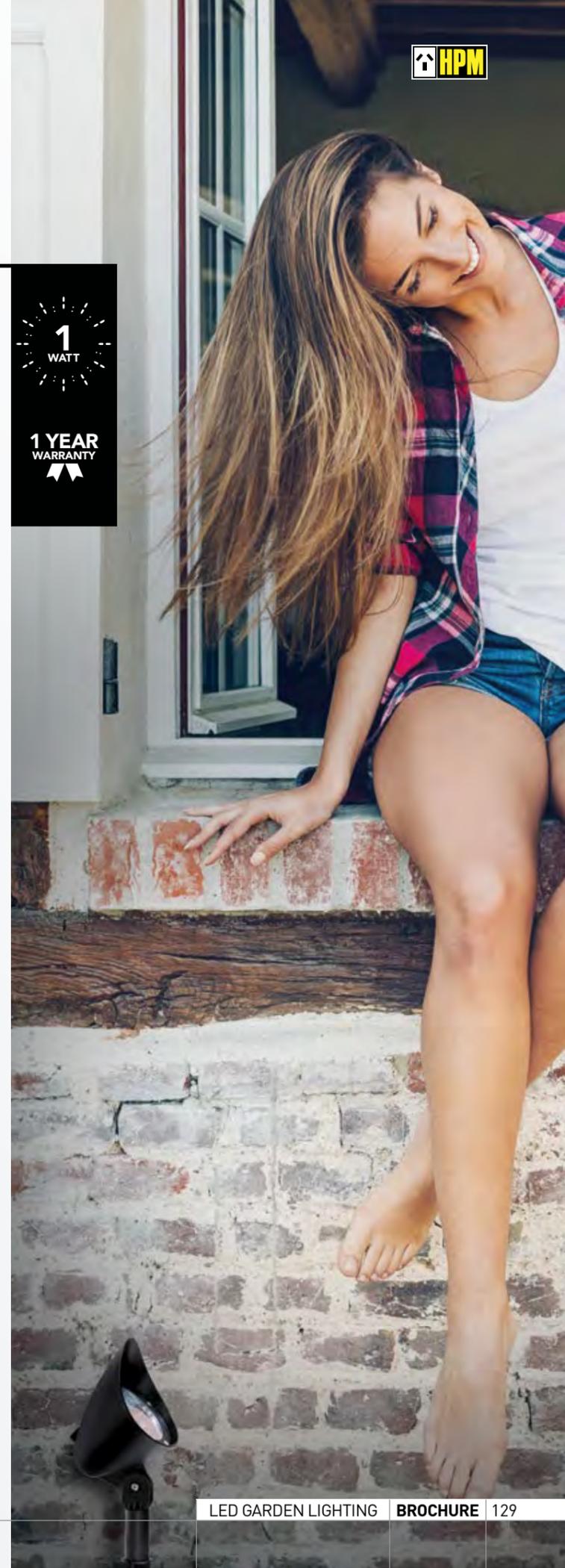
THE LILO - SQUARE LED SPOTLIGHT (12V)

NEW

HPM

If you want precise illumination and longevity in performance, our Lilo square will not disappoint. It's all about using contemporary lines and angles to make a statement. This sleek and square spotlight is designed with an ultra-modern look and feel.

TIP
Heavy duty construction

Power	1W
Nominal voltage	12V
Globe type	G4 LED lamp
Construction	Aluminium powdercoated
Package contents	1 x Light fixture with 0.3m cable and connector 1 x Ground stake 1 x Adjustable "U" clamp with screws 1 x G4 LED lamp
Requires	12V transformer and cable (not included in pack and sold separately)
CRI	80+
Weight	6.208kg
Adjustable head	Yes
Light colour	Warm White (2,700K) nominal
Wiring connection	Jaw lock connection
Product code	Black Finish GLLED003
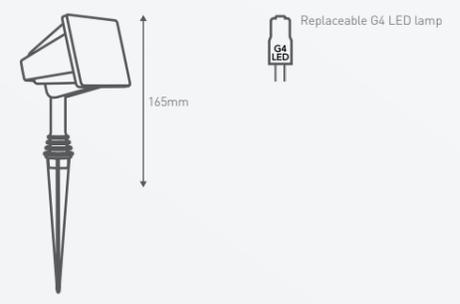
1 WATT

IP44 WEATHERPROOF

1 YEAR WARRANTY

165mm

Replaceable G4 LED lamp

G4 LED

THE LILO - ROUND LED SPOTLIGHT (12V)

NEW

This LED is made to jazz up any space or nook you point it to, and will add a splash of retro with its disco-like finish. Go bold, go cheeky and go eco-friendly with this Lilo round spotlight.

TIP

Heavy duty construction

Power	3W	
Nominal voltage	12V	
Globe type	LED	
Construction	Aluminium powder-coated	
Package contents	1 x Light fixture with 0.3m cable and connector	
	1 x Ground stake	
	1 x Adjustable "U" clamp with screws	
Requires	12V transformer and cable (not included in pack and sold separately)	
CRI	80+	
Adjustable head	Yes	
Light colour	Warm White (3,000K) nominal	
Lumens	200 lm	
Lifespan	10,000 h	
Product code	Black Finish	**GLLED004**

3 WATTS

IP55 WEATHERPROOF

1 YEAR WARRANTY

BEAM ANGLE 43°

100mm
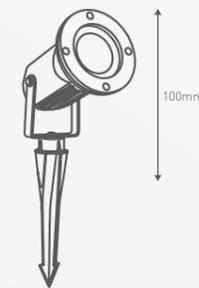
THE LILO - HOODED LED SPOTLIGHT (12V)

NEW

HPM

This is Lilo's most powerful and versatile spotlight. With a 5W light source, a durable construction and a tough exterior hood, we give this spotlight a 10/10 for reliability. The beam angle of 65° will allow you to point it in many directions and get ultra-creative with your outdoor light play.

TIP

Heavy duty construction

5 WATTS

IP55 WEATHERPROOF

1 YEAR WARRANTY

Power	5W
Nominal voltage	12V
Globe type	LED
Construction	Aluminium powder-coated
Package contents	1 x Light fixture with 0.3m cable and connector 1 x Ground stake 1 x Adjustable "U" clamp with screws 1 x G4 LED lamp
Requires	12V transformer and cable (not included in pack and sold separately)
CRI	80+
Adjustable head	Yes
Light colour	Warm White (3,000K) nominal
Lumens	200 lm
Mounting	Metal bracket / plastic ground stake
Wiring connection	Jaw lock connection
Lifespan	10,000 h
Product code	Black Finish GLLED006

BEAM ANGLE 65°

100mm
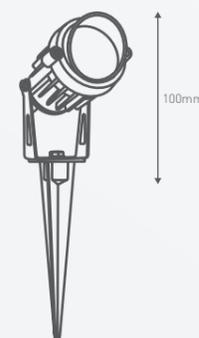
THE TULI LED POND SPOTLIGHT (12V)

NEW

Sprinkle these around your pond and create your own fantasy garden. Tuli is a lightweight spotlight that will not only bring out the green in your garden, but also leave a green footprint with her excellent use of energy.

TIP
Can be used above and below water

Power	4.5W
Nominal voltage	12V
Globe type	4.5W MR16 LED
Construction	Brass and Nickel plated
Package contents	1 x Light fixture with 2.9m cable and connector 1 x Ground stake 1 x Adjustable "U" clamp with screws 1 x 4.5W MR16 LED lamp
Requires	12V transformer and cable (not included in pack and sold separately)
CRI	80+
Adjustable head	Yes
Light colour	Warm White (3,000K) nominal
Lumens	370 lm
Mounting	Metal bracket / plastic ground stake
Wiring connection	Jaw lock connector
Lifespan	25,000 h
Product code	Black Finish **GLLED007** Brass Finish **GLLED008**

4.5 WATTS

IP68 SUBMERSIBLE

1 YEAR WARRANTY

BEAM ANGLE 67°

150mm

MR16 LED
Replaceable MR16 LED lamp

THE TULI
LED MINI POND SPOTLIGHT (12V)

NEW

Sprinkle these around your pond and create your own fantasy garden, but don't let her small size fool you. The miniature Tuli is an extra-small spotlight as powerful as her big sister Tuli.

TIP
Can be used above and below water

HPM

Power	3.5W
Nominal voltage	12V
Globe type	3.5W MR16 LED
Construction	Aluminium
Package contents	1 x Light fixture with 2.75m cable and connector 1 x Ground stake 1 x Adjustable "U" clamp with screws 1 x 3.5W MR16 LED lamp
Requires	12V transformer and cable (not included in pack and sold separately)
CRI	80+
Adjustable head	Yes
Light colour	Warm White (3,000K) nominal
Lumens	260 lm
Mounting	Metal bracket / Plastic ground stake
Wiring connection	Jaw lock connection
Lifespan	25,000 h
Product code	**Single Product** Black Finish **GLLED005** **4 Pack** Black Finish **GLLED009**

3.5 WATTS

IP68 SUBMERSIBLE

1 YEAR WARRANTY

BEAM ANGLE 93°

115mm

MR16 LED
Replaceable MR16 LED lamp

4 PACK - GLLED009

STARGATE LED BOLLARD (12V)

HPM

Strong and regal for the contemporary era, these Stargate bollards are made from hefty 304 grade stainless steel for long-lasting durability. They will impress any and every visitor.

Power	8W
Nominal voltage	12V
Globe type	LED lamp
Construction	304 Grade Stainless Steel
Package contents	1 x Bollard with 0.3m cable and connector
Requires	12V transformer and cable (not included in pack and sold separately)
Weight	0.7kg
Light colour	Warm White (3,000K) nominal
Product code	Silver finish **RGL1215**
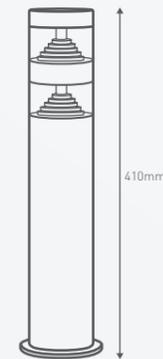
8 WATTS

IP67 WEATHERPROOF

1 YEAR WARRANTY

410mm

DIY STEP 1

CACTO LED BOLLARD (12V)

NEW

With its cylindrical contemporary curves and strong regal presence, our Cacto Bollard will light up your path with confidence. Its IP rating of 54 and LED globe mean that Cacto is the ideal pathlight for water resistance, durability and long-lasting performance. The stainless steel finish completes this elegant eye-catcher nicely!
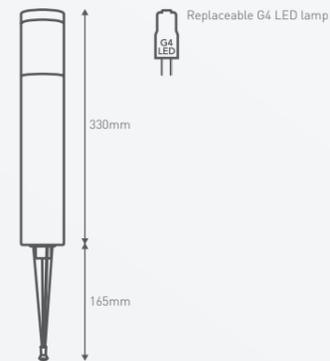
Main applications
Pathways and driveways

Power	1W
Nominal voltage	12V
Globe type	G4 LED lamp
Construction	304 Grade Stainless Steel
Package contents	1 x Bollard with 0.3m cable and connector 1 x Ground stake 1 x G4 LED lamp
Requires	12V transformer and cable (not included in pack and sold separately)
Light colour	Warm White (2,700K) nominal
Lumens	100 lm
Mounting	Plastic ground stake
Wiring connection	Jaw lock connection
Lifespan	6,000 h
Product code	Silver finish **RGLLED001**

1 WATTS

IP54 WEATHERPROOF

1 YEAR WARRANTY

Replaceable G4 LED lamp

G4 LED

330mm

165mm

ROUND LED WALL LIGHT 2 PACK (12V)

A classic, matt black D.I.Y round wall light. Echoing marine style design, it's great for those who find straight lines boring. Add them to landscaped areas and driveways for visibility and safety.

Power	0.5W (per light)
Nominal voltage	12V
Globe type	LED lamp
Construction	Aluminium and glass
Package contents	2 x LED round wall lights with 0.3m cable and connector
Requires	12V transformer and cable (not included in pack and sold separately)
Weight	0.5kg
Product code	Matt Black finish **RGLBW2**
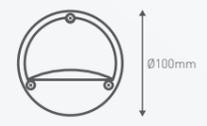
0.5 WATTS PER LIGHT

IP44 WEATHERPROOF

1 YEAR WARRANTY

Ø100mm

DIY STEP 1

## ROSI LED WALL AND STEP LIGHT (12V)

NEW

Add an inviting glow to each step you take with Rosi. This LED Steplight is ideal for adding extra safety to those 'hard to tread', providing drops of illumination wherever you wish. Rosi also amplifies those hidden and drab areas, bringing out a whole new beauty to your landscape design.

Power	1W
Nominal voltage	12V
Globe type	G4 LED lamp
Construction	Corrosion resistant 304 grade Stainless Steel
Package contents	1 x LED round wall light with 0.3m cable and connector 1 x 1W G4 LED lamp
Requires	12V transformer and cable (not included in pack and sold separately)
Light colour	Warm White (2,700K) nominal
Lumens	100 lm
Lifespan	6,000 h
Product code	Silver finish

1 WATTS

IP54 WEATHERPROOF

1 YEAR WARRANTY

Ø100mm

60mm

Replaceable G4 LED lamp

G4 LED
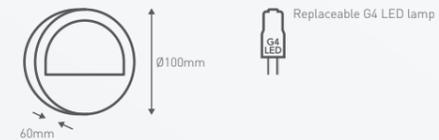
SQUARE LED WALL AND DECK LIGHT (12V)

With a peeping eyelid style design, this 12V wall light creates an interesting light spread in a downward direction. Line a few up along exterior walls for directional light and atmosphere.

Power	0.5W
Nominal voltage	12V
Globe type	LED lamp
Construction	Aluminium and glass
Package contents	1 x LED square wall light with 0.3m cable and connector
Requires	12V transformer and cable (not included in pack and sold separately)
Weight	0.268kg
Product code	Satin Silver finish **RGLSSW1**

55mm
100mm
100mm
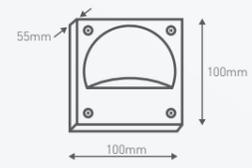
0.5 WATTS

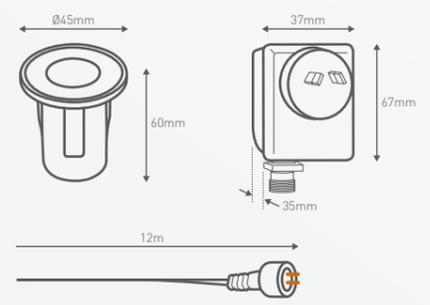**IP44** WEATHERPROOF

1 YEAR WARRANTY

DIY STEP 1

FLORA LED DECK LIGHT KIT 4 PACK (12V)

Constructed in a brushed stainless steel finish, this kit has everything you need to illuminate your outdoor space and with just the right lighting. Sleek and modern in design, these cylinder-shaped lights nestle seamlessly into patio floors, verandahs, or entryways. Connect up to 25 deck lights on one driver kit and be assured installation is simple!
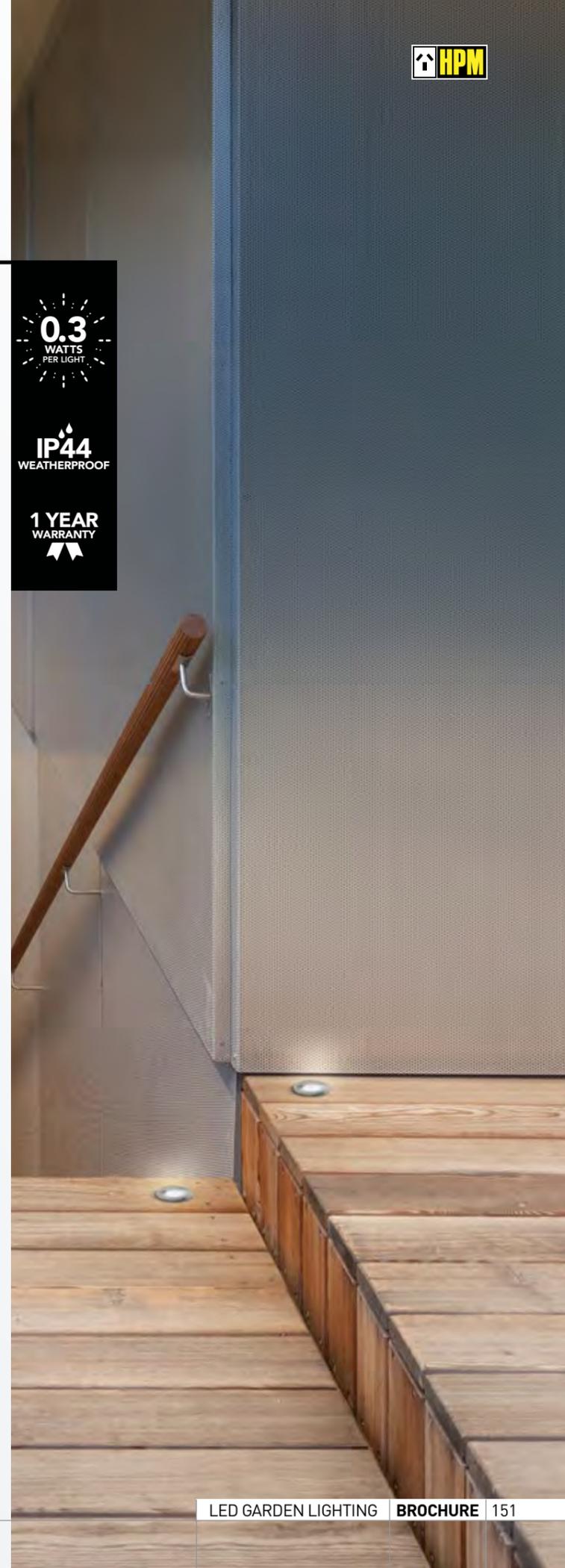
Power	0.3W (per light)
Nominal voltage	12V
Globe type	LED lamp
Construction	**Aluminium** Stainless Steel and glass
Package contents	4 x Deck lights 8 x Cable connector locking plugs 1 x 30mm cutting template 1 x 8.4W Transformer 1 x 12m Extra low voltage cable
Weight	4 x 0.2kg
Cut-out	Ø30mm
Light colour	White light
Product code	Brushed Stainless Steel finish **RGLKRSLD4**

0.3 WATTS PER LIGHT

IP44 WEATHERPROOF

1 YEAR WARRANTY

Ø45mm
60mm

37mm
67mm
35mm

12m

DIY STEP 1

FLORA LED DECK LIGHT 4 PACK (12V)

Enliven the edges of your deck and steps with these easy D.I.Y lights. With an LED light source they are safe to touch, so little ones are free from any burning harm. Safe, simple, stunners.

Power	0.3W (per light)
Nominal voltage	12V
Globe type	LED lamp
Construction	Aluminium, Stainless Steel and glass
Package contents	4 x Deck lights with cable connector locking plugs
Requires	1 x 10W Transformer 1 x Standard duty 0.5mm cable (not included in pack and sold separately)
Weight	4 x 0.5kg
Cut-out	Ø30mm
Light colour	White light
Product code	Brushed Stainless Steel finish **RGLKRSLD24**

Ø45mm
60mm

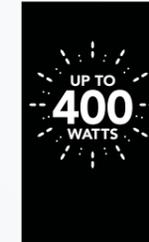**0.3 WATTS PER LIGHT**

IP44 WEATHERPROOF

1 YEAR WARRANTY

12V TRANSFORMERS

When installing 12V garden lights, a transformer is required to reduce the 240V mains voltage to the extra low voltage (12V) used by HPM D.I.Y. garden lights. Transformer selection is simple – just add up the total wattage of the garden lights in your installation and choose the next highest rating for your transformer. For example, 10W light + 20W light + 10W light + 10W light = 50W.

UP TO
400
WATTS

Maximum wattage	60W	105W	150W	200W	400W
Maximum load	60VA - 400VA models				
Nominal voltage	12V				
Resetting thermal overload protection	Yes				

Product code		
	60W	RGLTR60
	105W	RGLTR105
	150W	RGL11
	200W	RGLTR220
	400W	RGLTR400 (IP64)

RGLTR60   RGLTR105   RGL11

100mm   115mm   110mm

80mm 140mm   85mm 180mm   85mm 190mm

RGLTR220   RGLTR400

100mm   164mm

120mm 200mm   164mm 105mm

60W

105W

150W

200W

400W

12V TRANSFORMERS WITH INTEGRATED TIMERS & SENSORS

	LED INSTALLATION PACK	
10 WATTS	**Maximum wattage**	10W
	Nominal voltage	12V
	Weatherproof rating	IP56
	Resetting thermal overload protection	Yes
IP56 WEATHERPROOF	Cable length	12m
	Colour	Black
	Weight	0.95kg
	Product code	**RGLPCTAW20**

37mm 67mm 35mm 12m

LED INSTALLATION PACK

A handy D.I.Y LED garden light installation pack including 10m of cable and a 10VA transformer.

	TRANSFORMER WITH SENSOR	
150 WATTS	**Maximum wattage**	150W
	Nominal voltage	12V
	Weatherproof rating	IP44
	Automatic switch	Yes
IP44 WEATHERPROOF	**UV Resistant**	Yes
	Weight	0.203kg
	Colour	Black
	Product code	**DGLS150**

30mm 70mm 35mm 1m

TRANSFORMER WITH SENSOR

Our HPM 12V Dusk to Dawn Timer with Sensor will automatically switch on garden lights at dusk and switch them off at dawn. Enjoy an easy and safe installation.

TRANSFORMER WITH TIMER

Come home late to a beautifully lit garden. Add a sunset timer to your D.I.Y garden light installation and enjoy the convenience of automation.

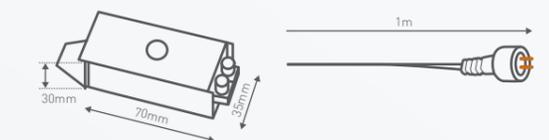|	TRANSFORMER WITH TIMER	
200 WATTS	**Maximum wattage**	200W
	Weatherproof rating	IP44
	Automatic switch	Yes
IP44 WEATHERPROOF	**Weight**	0.350kg
	Colour	Black
	Product code	**RGL10**

100mm 60mm 2m

GARDEN LIGHTING CABLES AND TRANSFORMERS CONFIGURATION CHART

IMPORTANT INFORMATION

THE TOTAL WATTAGE OF GARDEN LIGHTING MUST NOT EXCEED THE MAXIMUM WATTAGE OF THE TRANSFORMER

RANGE	PRODUCT CODE	MAXIMUM WATTAGE	IP RATING	COMMENTS
Outdoor transformers	RGLPCTAW20	10W	IP67	Featured with resetting thermal overload protection which shuts down the system if overheated. Restart when it gets cool. Kit suitable for deck lights. Comes with 12 metres of AW20 gauge narrow extra low voltage.
	RGLTR60	60W	IP56	Featured with resetting thermal overload protection which shuts down the system if overheated. Restart when it gets cool.
	RGLTR105	105W		
	RGL11	150W		
	RGLTR220	220W		
	RGLTR400	400W	IP64	

RANGE	PRODUCT CODE	MAXIMUM WATTAGE	AUTOMATED SWITCH	UV RESISTANT	IP RATING	INSTALLATION	COMMENTS
Transformers with integrated timers and sensors	DGLS150	150W	No	Yes	IP44	Should be installed between the transformer and the lights	Can be used with any 12V garden light system. Locate the sensor in a relatively sunny area to allow the photo-electric sensor to work.
	RGL10	200W	Yes	No			The timer turns the light on at sunset and off after time set on the dial has expired (increments of 2, 4, 6, or 8 hours).

RANGE	PRODUCT CODE	UTILISATION	LENGTH	COPPER THICKNESS	NO. OF CORES	COMMENTS
Cables	RGL8	Standard Duty	10m	1.3mm²	2	Standard utilisation
	RGLHSC15	Standard Duty	15m	0.5mm²		For use with all HPM LED Deck & Step lights
	RGL9	Standard Duty	20m	1.3mm²		Standard utilisation
	RGLCL21/30	Heavy Duty	30m	3.3mm²		Recommended for high wattage loads
	RGLCL33/30	Extra Heavy Duty	30m	3.3mm²		Recommended for high wattage loads

RANGE	PRODUCT CODE	PACK	COMMENTS
Cable connector	CDGLCC4	4 Connectors	Join extra low voltage cables together. Simply insert the cable into the connector and twist together. These connectors contain a weatherproof sealant so no tape is required.

DIY STEP 3 CABLES

Choose from a range of garden cables to suit your needs:
narrow, standard duty, heavy duty.

Determine the location of your garden lights and the position of your transformer. When extra low voltage is run through the cable over a long distance energy is lost. This is called voltage drop. If the voltage drops too much, your appliance will not work efficiently. See selection table below:

PRODUCT CODE	TOTAL WATTAGE OF YOUR GARDEN LIGHTS				
CABLE TYPE REQUIRED	10W	20W	30W	40W	50W
Extra Heavy Duty	90m	45m	30m	25m	20m
Heavy Duty	60m	30m	20m	15m	10m
Standard Duty	35m	20m	10m	8m	30m

UP TO 30 METRES

2 CORE CABLE

Length	10m
Wire gauge	16 AWG, 2 core cable
Copper thickness	1.3mm²
Utilisation	Standard duty, narrow places
Colour	Black
Construction	Plastic and copper
Product code	RGL8

Length	20m
Wire gauge	16 AWG, 2 core cable
Copper thickness	1.3mm²
Utilisation	Standard duty, narrow places
Colour	Black
Construction	Plastic and copper
Product code	RGL9

Length	30m
Copper thickness	2.1mm²
Utilisation	Heavy duty
Colour	Black
Construction	Plastic and copper
Product code	RGLCL21/30

Length	30m
Copper thickness	3.3mm²
Utilisation	Extra Heavy Duty
Colour	Black
Construction	Plastic and copper
Product code	RGLCL33/30

Length	15m
Copper thickness	0.5mm²
Utilisation	Standard duty, narrow
Colour	Black
Construction	Plastic and copper
Product code	RGLHSC15

ACCESSORIES

REPLACEMENT LED GLOBES

Designed to replace halogen globes so you can reduce the overall energy consumption of your garden lighting. This means it suits a wide variety of 12V garden lights including pathlights, spotlights and uplights.

SOLAR RECHARGEABLE BATTERIES

HPM solar rechargeable batteries are suitable for use with HPM solar garden lights. This handy 4-pack is a reliable source of power for keeping your lights on.
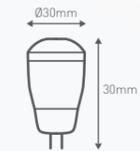
CABLE CONNECTORS

Cable connectors join your extra low voltage cables together. You simply insert the cables into the connector and twist together. These connectors contain a weatherproof sealant so no tape is required.

0.5 WATTS / MR16

REPLACEMENT GLOBES

Power	0.5W
Lamp base	MR16
Nominal voltage	12V
Globe type	LED
Construction	Aluminium and glass
Package contents	2 x LED Globes
Finish	Satin Silver
Light colour	White light
Product code	**DGLWLED**

Ø30mm / 30mm

SOLAR

BATTERIES

Current	600mAh
Construction	NiCD Nickel-cadmium
Colour	Yellow
Package contents	4 x Solar rechargeable batteries
Battery type	AA
Product code	**DSLBAT4**

50mm / 30mm

CABLE CONNECTORS

Nominal voltage	12V
Construction	Plastic
Colour	Black
Product code	**CDGLCC4**

Ø10mm / 20mm

HPML0707

03/2018