



Life IN Light

MEGAMAN®

Professional LED



2011/12



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WHO WE ARE



Established in 1994, MEGAMAN® is now the world's leading manufacturer of energy saving lamps. We are a phenomenally successful global brand – known internationally for our innovative, eco-friendly lighting products using Compact Fluorescent Lamp (CFL) and Light Emitting Diode (LED) technology.












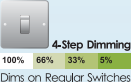






MEGAMAN® offers over 400 high-quality products that are perfect eco-replacements for traditional incandescent, halogen and metal halide lights. Our lamps are specified in low energy building projects around the world, and our extensive research and development activities ensure that a continuous supply of new, exciting, energy saving lighting products come to market every year.

Committed to sustainable development and environmental management, we incorporate eco-elements into every stage of the product life cycle, including research and development, design, manufacturing, office system, packaging, disposal and recycling through a 'Design for Environment' programme. The use of amalgam in all MEGAMAN® CFL products since January 2008 has reduced the environmental impact of all our processes, from lamp production to disposal stages.

The unique MEGAMAN® range of energy saving lamps is achieving impressive and rapidly growing sales in over 90 countries across Europe, the Asia-Pacific Region, the Middle East, Africa and the Americas.



MEGAMAN[®] Milestones

2011	R9 Technology		LED Classic with A60 shape	
2010	LED Non-Reflector Series		LED Reflector Series perfect alternative to metal halide	
2009	Patented the PowerLens Technology		LED Reflector Series with TCH technology	
2008	1 st Plug-in lamp with integral ballast - PLi		Amalgam has been employed in full series of CFL since January 2008	 Amalgam Technology No Mercury Hazard
2007	DIMMERABLE technology (linear-dimming lamps)		 Linear Dimming 100% 10% Dims on Dimmer Switches	
2005	DorS DIMMING technology (step-dimming lamps)		 4-Step Dimming 100% 66% 33% 5% Dims on Regular Switches	
2005	1 st RoHS compliant CFL			
2004	INGENIUM [®] technology	 15,000 hrs Lifetime 600,000 Switching Cycles Shorter Preheating Time		
2002	1 st CFL Reflector GU10		Patented the Silicone Protection technology	
1999	Patented the "Cooling-tube" technology of CFL			
1997	1 st Candle-shaped CFL			
1996	1 st Classic-shaped CFL			
1994	MEGAMAN [®] Incorporated			

Rigorous Quality and Management Systems

To ensure that MEGAMAN® products comply with the highest quality standards, the MEGAMAN® manufacturing plants are equipped with state of the art assembly lines. Our in-house laboratory is ISO 17025 certified by CNAS and NVLAP, and it is eligible to perform on-site testing for UL, SEMKO and TUV marks.

Our international recognitions, namely ISO 9001:2000, ISO 14001:2004, ISO 14064-1:2006, OHSAS 18001:1999, SA 8000:2001 and QC 080000:2005, ensure that we run our business under the most stringent management and quality systems, while taking account of the many “green” elements in our operations. These international accreditations also demonstrate our care for the welfare of our employees, and our pledge to be socially responsible to the communities in which we operate.



CNAS



NVLAP



ISO 9001



ISO 14001



ISO 14064



OHSAS 18001



SA 8000



QC080000

Product Quality Assurance

MEGAMAN® lamps are a symbol of eminence, achieved through the use of premium quality materials, innovative technologies and stringent control measures on product safety and performance, including energy saving standards.



SEMKO



TÜVRheinland®



Innovative and Unique Products

With our patented LED design and Thermal Conductive Highway™ (TCH) technology, the MEGAMAN® LED lamp is able to deliver superb performance, including low power consumption, excellent light output and low maintenance costs. It provides measurably better quality lighting performance than any other competitive LED based product consuming the same power!

Opening a new era in LED lighting solutions

Unique Features

- Perfect alternative to traditional incandescent, halogen and metal halide lamps
- High colour rendering up to Ra94
- High colour temperature consistency: tolerance is only +/-100K
- High luminous maintenance: up to 90% initial lumen can be achieved even at the end of lamp life
- Long lamp life up to 40,000 hours
- Up to 85% energy savings
- Emits one third of the heat of traditional light sources
- No UV and IR radiation
- Colour temperature options of Warm White and Cool White
- Options of different beam angles for LED Reflector Series

Additional Benefits

- Mercury-free
- Instant start-up
- Wide range of operating temperatures (-30°C to +40°C)

Applications

- Boutiques / Shops
- Shopping Malls
- Hotels
- Restaurants
- Lounges
- Museums
- Galleries
- Offices...etc.

MEGAMAN® Philosophy on Reflector Design and Thermal Conductive Highway™

Different from the common lens-style LED lamps in the market, MEGAMAN® has made use of a reflector design and employed Thermal Conductive Highway™ (TCH) technology that offers the most efficient LED lighting solution with the benefits of efficient heat dissipation, better beam control and excellent optical efficiency as well as low glare lighting.

TCH
Technology



Optimum Thermal Control

MEGAMAN® patented TCH technology uses a unique design of *heat drain* across the reflector that allows the LEDs to dissipate heat efficiently via the heat sink and prevents deterioration of the LED multi-chip array and other components. The technology also gives the lamps a longer life with high lumen maintenance, resulting in up to 90% of initial lumens being available even at the end of lamp life.

True Replacement of Traditional Lamps

A reflector can spread a predefined portion of illumination from a light source to deliver the designed light distribution. The use of reflectors also dramatically reduces the amount of light spillage from outside the designated beam angle. LED spotlights with reflectors are more aesthetically pleasing and conform to the expected appearance of a spotlight.

Deliver Comfortable Lighting

The unique approach that MEGAMAN® takes with axial LED geometry facilitates the use of reflectors with all the associated advantages of precise beam control and allows lumens to be where they are wanted with less glare.

Excellent Optical Efficiency

The technology of using reflectors for light sources is mature and widely used because of the technology's extremely high optical efficiency of up to 98%. Due to this high optical efficiency, energy loss is minimised, creating a very effective energy saving solution.



MEGAMAN® LED reflectors



Common lens-style LED lamps in the market

R9 Technology



Standard LED lamp



LED R9 lamp



The MEGAMAN® LED R9 series maximises the visual impact of meat, fresh fruit and vegetables by increasing the product's red colour rendition. Thanks to the MEGAMAN® innovative design and patented technology, these lamps offer retailers a high quality lighting intensity and superb performance, and are the best alternative to traditional halogen and metal halide lamps.

When we determine the general colour rendering index (Ra), the first eight colours in the Test Colour Sample (TCS; see Figure 1) defined in accordance with DIN 6169 are employed for the calculation. In addition to these eight colours (R1 to R8), there are another six colours (R9 to R14) that are more vivid and known as "saturated" colours.

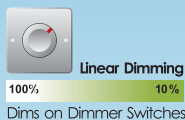
The MEGAMAN® LED R9 lamp not only has a high red colour rendition (R9) value of ≥ 75 , but it also has a high value of the other "saturated" colours (R10 to R14), which allows the beautiful red of an object to be revealed and creates well-balanced and high quality lighting. The MEGAMAN® LED R9 series is perfect for food and other display lighting applications where a sense of freshness and the richness of red colour are needed.

TSC	Appearance under daylight	Sample
R1	Light greyish red	
R2	Dark greyish yellow	
R3	Strong yellow green	
R4	Moderate yellowish green	
R5	Light bluish green	
R6	Light blue	
R7	Light violet	
R8	Light reddish purple	
R9	Strong red	
R10	Strong yellow	
R11	Strong green	
R12	Strong blue	
R13	Light yellowish pink	
R14	Moderate olive green	

Figure 1 Test Colour Sample

Total Dimming Solution

Our LED Dimming Series comes in three forms:

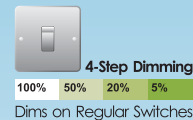


Linear Dimming (100% to 10%) – using standard Dimmer Switches

This provides a smooth dimming experience similar to that obtained with traditional incandescent and halogen lamps connected to a leading edge dimmer.

To dim, turn the knob to achieve the required brightness level from 100% to 10%.

Please visit www.megaman.cc/LEDdimmers for the list of compatible dimmers.

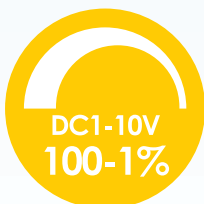
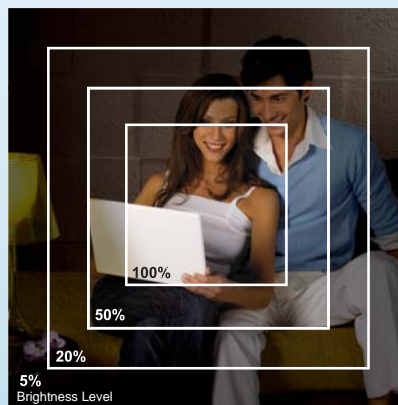


4-Step Dimming – using standard ON/OFF Light Switches

This concept provides convenient, hassle-free instant dimming using a standard on/off light switch.

You can easily and economically create an assortment of stunning ambient lighting schemes with DorS DIMMING technology.

Switch the lamp on. To dim, switch the lamp off and then on again within 3 seconds. Repeat to dim the lamp to the desired level (100%, 50% 20%, 5% and back to 100%).



Linear Dimming (100% to 1%) – using DC1-10V Dimming Driver and DC1-10V Dimmer

Linear Dimming facilitates a smooth dimming experience comparable to traditional lamp sources.

The brightness level can be seamlessly dimmed from 100% down to 1% when the lamp is connected to a DC1-10V dimming driver and DC1-10V dimmer.







LED REFLECTOR



LED REFLECTOR - Line Voltage PAR16

Perfect replacement for 35W and 50W halogen PAR16

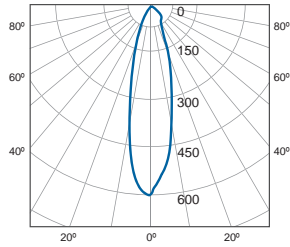
Employing Thermal Conductive Highway™ (TCH) technology, these lamps deliver powerful light output of up to 900cd with power consumption of only 8W and a 35° beam angle.

- True replacement for 35W and 50W halogen PAR16 by 7W and 8W versions
- Linear dimming and 4-step dimming versions available*
- High colour rendering of up to Ra92
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Long lamp life of 25,000 hours
- Energy savings of up to 84%
- Save more energy consumption when lamp is dimmed
- Operating temperature: -30° to +40°

* Please refer to page 9 for details. Compatible dimmer list for the LR1108d-50H35D is available at www.megaman.cc/LEDdimmers.



i 

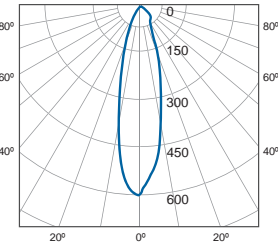


m	Lux	Ø cm
0.5	2400	32
1	600	63
1.5	267	95
2	150	126

Beam angle = 35°



ii 

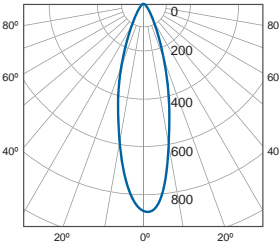


m	Lux	Ø cm
0.5	2400	32
1	600	63
1.5	267	95
2	150	126

Beam angle = 35°



iii 

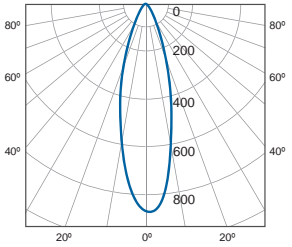


m	Lux	Ø cm
0.5	3600	32
1	900	63
1.5	400	95
2	225	126

Beam angle = 35°



iv 



m	Lux	Ø cm
0.5	3600	32
1	900	63
1.5	400	95
2	225	126

Beam angle = 35°

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR0407-35H35D-E14-2800K-230V	220-240	7	25000	600	35	270	85	50	87	94	N/A	i
LR0407-35H35D-E14-4000K-230V	220-240	7	25000	600	35	270	92	50	87	94	N/A	i
LR0407-35H35D-GU10-2800K-230V	220-240	7	25000	600	35	270	85	50	74	83	N/A	i
LR0407-35H35D-GU10-4000K-230V	220-240	7	25000	600	35	270	92	50	74	83	N/A	i
LR1107s-35H35D-GU10-2800K-230V	220-240	7	25000	600	35	270	85	50	79	89	4-Step*	ii
LR1107s-35H35D-GU10-4000K-230V	220-240	7	25000	600	35	270	92	50	79	89	4-Step*	ii
LR0408-50H35D-GU10-2800K-230V	220-240	8	25000	900	35	330	80	50	74	84	N/A	iii
LR0408-50H35D-GU10-4000K-230V	220-240	8	25000	900	35	330	82	50	74	84	N/A	iii
LR1108d-50H35D-GU10-2800K-230V	220-240	8	25000	900	35	380	80	50	79	120	100-10%*	iv
LR1108d-50H35D-GU10-4000K-230V	220-240	8	25000	900	35	380	82	50	79	120	100-10%*	iv

* Please refer to page 9 for details. Compatible dimmer list for the LR1108d-50H35D is available at www.megaman.cc/LEDdimmers.



LED REFLECTOR - Line Voltage

PAR20

True replacement for 50W halogen PAR20 with step dimming feature available

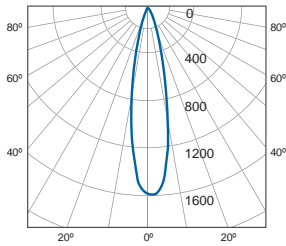
With MEGAMAN® patented LED design and Thermal Conductive Highway™ (TCH) technology, the LED PAR20 delivers superb lighting performance with low heat output, making it a flawless replacement for a 50W halogen PAR20.

- Eco-friendly replacement for 50W halogen PAR20
- 4-step dimming version available*
- High colour rendering of up to Ra85
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Long lamp life of 25,000 hours
- Energy savings of 84%
- Greatly save energy when lamp is dimmed
- Operating temperature: -30° to +40°

* Please refer to page 9 for details.



i

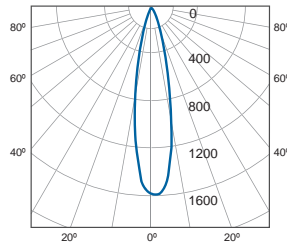


m	Lux	Ø cm
0.5	6400	27
1	1600	54
1.5	711	80
2	400	107

Beam angle = 30°



ii



m	Lux	Ø cm
0.5	6400	27
1	1600	54
1.5	711	80
2	400	107

Beam angle = 30°

Product Code

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR0308-50H30D-E27-2800K-230V	220-240	8	25000	1600	30	430	82	65	95	140	N/A	i
LR0308-50H30D-E27-4000K-230V	220-240	8	25000	1600	30	430	85	65	95	140	N/A	i
LR0308s-50H30D-E27-2800K-230V	220-240	8	25000	1600	30	430	82	65	95	143	4-Step*	ii
LR0308s-50H30D-E27-4000K-230V	220-240	8	25000	1600	30	430	85	65	95	143	4-Step*	ii

* Please refer to page 9 for details.



LED REFLECTOR - Line Voltage

PAR30

Excel in high energy savings, best replacement for 100W halogen PAR30

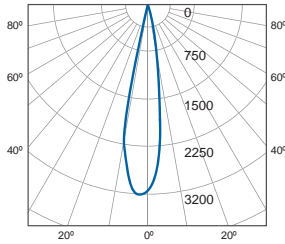
The MEGAMAN® LED PAR30 reflector offers an eco-solution with superb lighting performance to replace the 100W halogen PAR30. This LED reflector offers 85% energy savings and high lumen maintenance, greatly reducing your maintenance costs and electricity bill.

- Best replacement for 100W halogen PAR30
- 4-step dimming version available*
- High colour rendering of up to Ra92
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Long lamp life of 30,000 hours
- Significant energy savings of 85% and low maintenance costs
- Operating temperature: -30° to +40°

* Please refer to page 9 for details.



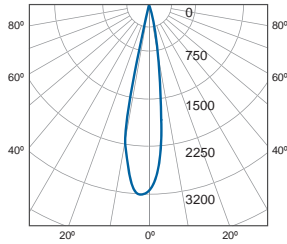
i



m	Lux	Ø cm
0.5	12800	21
1	3200	43
1.5	1422	64
2	800	85

Beam angle = 24°

ii



m	Lux	Ø cm
0.5	12800	21
1	3200	43
1.5	1422	64
2	800	85

Beam angle = 24°

Product Code

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR0215-100H24D-E27-2800K-230V	220-240	15	30000	3200	24	530	85	96	102	239	N/A	i
LR0215-100H24D-E27-4000K-230V	220-240	15	30000	3200	24	530	92	96	102	239	N/A	i
LR0215s-100H24D-E27-2800K-230V	220-240	15	30000	3200	24	530	85	96	102	241	4-Step*	ii
LR0215s-100H24D-E27-4000K-230V	220-240	15	30000	3200	24	530	92	96	102	241	4-Step*	ii

* Please refer to page 9 for details.



LED REFLECTOR - Line Voltage

PAR 38

Delivers powerful light output without the shortcomings of equivalent halogen or metal halide solutions

With a powerful luminous intensity, LED PAR38 reflectors 15W and 20W are the perfect replacements for 75W halogen and 25W metal halides to illuminate extensive areas.

- Powerful luminous intensity of up to 6800cd; provides a true replacement for 75W halogen PAR38 and 25W metal halide PAR38 by 15W and 20W versions
- 4-step dimming version in 15W*
- Instant start capable – reaches the declared colour temperature at the time of switching on, while metal halides deliver greenish colour when starting up
- Hot restrike capable
- Eliminates the risk of potential exposure to UV and radioactive Kr85 in case of lamp breakage
- High colour rendering of up to Ra92
- 90% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Lifetime of 30,000 hours, which is 3 times longer than equivalent metal halides
- Up to 80% energy savings
- Operating temperature: -30° to +40°

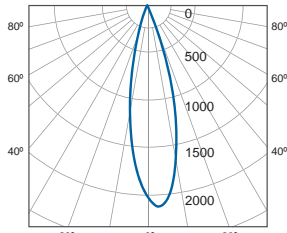
* Please refer to page 9 for details.



NEW



i

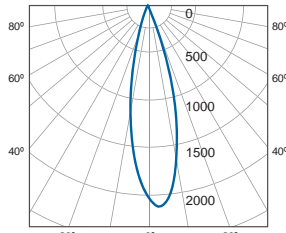


m	Lux	Ø cm
0.5	8800	27
1	2200	54
1.5	978	80
2	550	107

Beam angle = 30°



ii

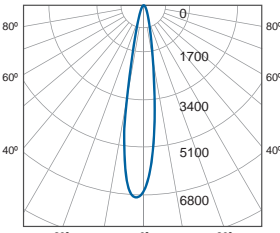


m	Lux	Ø cm
0.5	8800	27
1	2200	54
1.5	978	80
2	550	107

Beam angle = 30°



iii

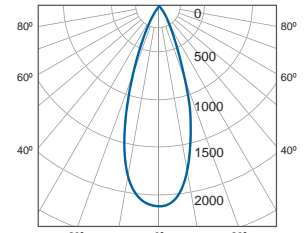


m	Lux	Ø cm
0.5	27200	22
1	6800	44
1.5	3022	67
2	1700	89

Beam angle = 25°



iv



m	Lux	Ø cm
0.5	8800	41
1	2200	83
1.5	978	124
2	550	166

Beam angle = 45°

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR0915-75H30D-E27-2800K-230V	220-240	15	30000	2200	30	630	85	121	133	458	N/A	i
LR0915-75H30D-E27-4000K-230V	220-240	15	30000	2200	30	630	92	121	133	458	N/A	i
LR0915s-75H30D-E27-2800K-230V	220-240	15	30000	2200	30	630	85	121	133	464	4-Step*	ii
LR0915s-75H30D-E27-4000K-230V	220-240	15	30000	2200	30	630	92	121	133	464	4-Step*	ii
LR0920-25M25D-E27-2800K-230V	220-240	20	30000	6800	25	1200	82	121	133	485	N/A	iii
LR0920-25M25D-E27-4000K-230V	220-240	20	30000	6800	25	1200	85	121	133	485	N/A	iii
LR0920-25M45D-E27-2800K-230V†	220-240	20	30000	2200	45	1100	82	121	133	485	N/A	iv
LR0920-25M45D-E27-4000K-230V†	220-240	20	30000	2200	45	1100	85	121	133	485	N/A	iv

* Please refer to page 9 for details.

† Preliminary data



LED REFLECTOR - Line Voltage

AR111

Eco-lighting solution for halogen AR111 replacement with step dimming version available

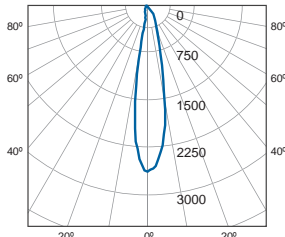
Powered by MEGAMAN® patented Thermal Conductive Highway™ (TCH) technology, the MEGAMAN® LED AR111 reflector is able to achieve an excellent luminous intensity with different beam angle options available.

- Perfect replacement for 35W and 50W halogen AR111 by 10W and 15W versions
- 4-step dimming versions available*
- High colour rendering of up to Ra92
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Impressive 30,000 hours lamp life reduces re-lamping costs
- Save more energy when lamp is dimmed
- Operating temperature: -30° to +40°

* Please refer to page 9 for details.



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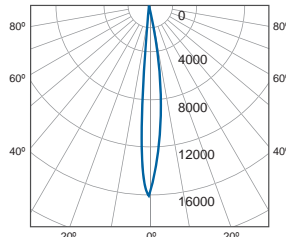


m	Lux	Ø cm
0.5	10000	21
1	2500	43
1.5	1111	64
2	625	85

Beam angle = 24°



ii

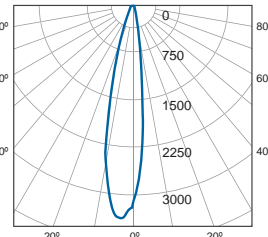


m	Lux	Ø cm
0.5	64000	7
1	16000	14
1.5	7111	21
2	4000	28

Beam angle = 8°



iii

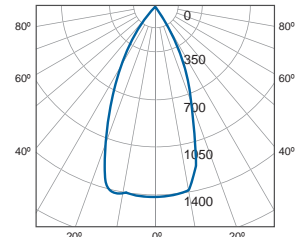


m	Lux	Ø cm
0.5	14400	21
1	3600	43
1.5	1600	64
2	900	85

Beam angle = 24°



iv



m	Lux	Ø cm
0.5	5600	41
1	1400	83
1.5	622	124
2	350	166

Beam angle = 45°

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR0110-35H24D-GU10-2800K-230V	220-240	10	30000	2500	24	300	85	111	94	245	N/A	i
LR0110-35H24D-GU10-4000K-230V	220-240	10	30000	2500	24	300	92	111	94	245	N/A	i
LR0110s-35H24D-GU10-2800K-230V	220-240	10	30000	2500	24	300	85	111	94	245	4-Step*	i
LR0110s-35H24D-GU10-4000K-230V	220-240	10	30000	2500	24	300	92	111	94	245	4-Step*	i
LR0815-50H08D-GU10-2800K-230V	220-240	15	30000	16000	8	450	82	111	94	264	N/A	ii
LR0815-50H08D-GU10-4000K-230V	220-240	15	30000	16000	8	450	85	111	94	264	N/A	ii
LR0115-50H24D-GU10-2800K-230V	220-240	15	30000	3600	24	530	82	111	94	245	N/A	iii
LR0115-50H24D-GU10-4000K-230V	220-240	15	30000	3600	24	530	85	111	94	245	N/A	iii
LR0115s-50H24D-GU10-2800K-230V	220-240	15	30000	3600	24	530	82	111	94	249	4-Step*	iii
LR0115s-50H24D-GU10-4000K-230V	220-240	15	30000	3600	24	530	85	111	94	249	4-Step*	iii
LR0615-50H45D-GU10-2800K-230V	220-240	15	30000	1400	45	570	82	111	94	245	N/A	iv
LR0615-50H45D-GU10-4000K-230V	220-240	15	30000	1400	45	570	85	111	94	245	N/A	iv

* Please refer to page 9 for details.



LED REFLECTOR - Line Voltage

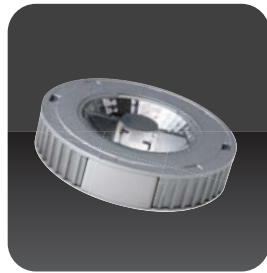
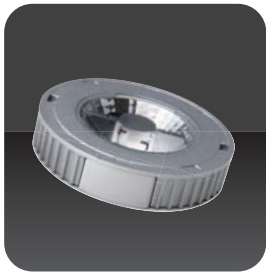
GX53

Integral LED cabinet lighting with incredible slim profile

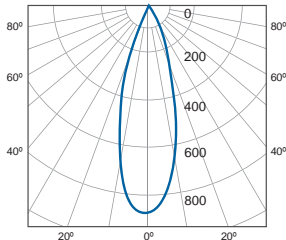
The MEGAMAN® LED GX53 reflector has an ultra slim profile, which is an innovative solution for slim surface mounted luminaires and recessed fittings that have long been haunted by blazing-heat halogens, causing overheating, discoloration and deformation to furniture and display items.

- Integral LED cabinet lighting with GX53 lamp base
- Ultra slim profile: lamp length is only 25mm
- High luminous efficacy: 70lm/W
- Long lamp life of 30,000 hours
- High colour temperature consistency: tolerance is well controlled with only +/-100K
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- High colour rendering of up to Ra85
- Operating temperature: -30° to +40°





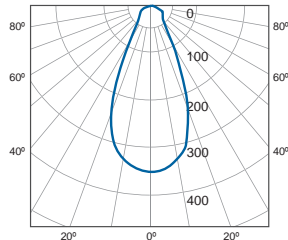
i



m	Lux	Ø cm
0.5	3400	27
1	850	54
1.5	378	80
2	213	107

Beam angle = 30°

ii



m	Lux	Ø cm
0.5	1400	58
1	350	115
1.5	156	173
2	88	231

Beam angle = 60°

Product Code

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR1305-30D-GX53-2800K-230V	220-240	5	30000	850	30	350	82	75	25	82	N/A	i
LR1305-30D-GX53-4000K-230V	220-240	5	30000	850	30	350	85	75	25	82	N/A	i
LR1305-60D-GX53-2800K-230V	220-240	5	30000	350	60	350	82	75	25	82	N/A	ii
LR1305-60D-GX53-4000K-230V	220-240	5	30000	350	60	350	85	75	25	82	N/A	ii



LED REFLECTOR - Driven by Halogen Transformer

MR16

An eco-conscious lighting solution with the same compact profile of halogen MR16

Designed for standard MR16 applications, the MEGAMAN® LED MR16 reflector is compact and has an outlook similar to a halogen MR16 which is familiar to customers. Together with the special feature of working with the most common AC/DC 12V halogen transformer*, the lamp is the most conventional and perfect substitute for the halogen MR16.

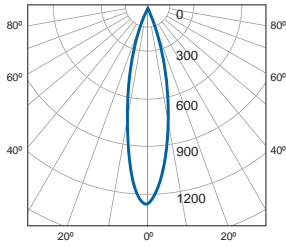
- Delivers supreme light output up to 1300cd which is an ideal alternative to the 35W halogen MR16
- Excellent in colour rendering of up to Ra85
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Long lamp life of up to 25,000 hours
- Operating temperature: -30° to +40°
- Alternative to halogen transformer is LED constant voltage converter, applicable model from MEGAMAN® is LD0106-K12#

* Please visit www.megaman.cc/RHT for the list of recommended halogen transformers.

Please refer to page 50 for details.

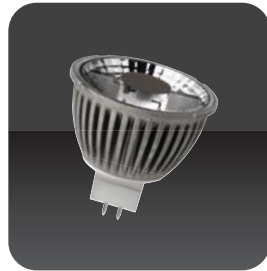


i

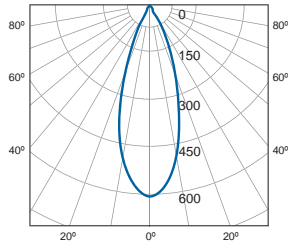


m	Lux	Ø cm
0.5	5200	21
1	1300	43
1.5	578	64
2	325	85

Beam angle = 24°



ii



m	Lux	Ø cm
0.5	2400	32
1	600	65
1.5	267	97
2	150	130

Beam angle = 36°

Product Code

Product Code	Voltage (V)	Input Current (mA)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
ER1006-35H24D-GU5.3-2800K-12V	12	750	6	25000	1300	24	240	82	50	51	60	N/A	i
ER1006-35H24D-GU5.3-4000K-12V	12	750	6	25000	1300	24	240	85	50	51	60	N/A	i
ER1006-35H36D-GU5.3-2800K-12V	12	750	6	25000	600	36	240	82	50	51	60	N/A	ii
ER1006-35H36D-GU5.3-4000K-12V	12	750	6	25000	600	36	240	85	50	51	60	N/A	ii

MEGAMAN® LED MR16 has a similar appearance to a halogen MR16:



MEGAMAN® LED MR16



Halogen MR16



LED REFLECTOR - Driven by Halogen Transformer

AR111

Powerful light output, the LED AR111 reflector works with most conventional halogen transformers*

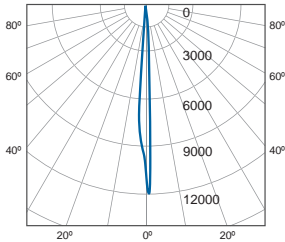
The MEGAMAN® LED AR111 reflector works with the common AC/DC 12V halogen transformer* to deliver excellent lighting performance, and is a perfect alternative to the halogen AR111. Empowered by patented Thermal Conductive Highway™ (TCH) technology, the MEGAMAN® LED AR111 reflector is optimised for a long lifetime of 40,000 hours to lower maintenance costs and provides the highest luminance comparable to the halogen AR111.

- Best alternative to the halogen AR111
- Deliver powerful light output up to 12000cd with power consumption of only 11W and a 8° beam angle
- High colour rendering of up to Ra85
- Lifetime of 40,000 hours; 85% of initial lumen can be achieved even at the end of lamp life
- High colour temperature consistency: tolerance is only +/-100K
- Energy savings of 78%
- Operating temperature: -30° to +40°

* Please visit www.megaman.cc/RHT for the list of recommended halogen transformers.



NEW

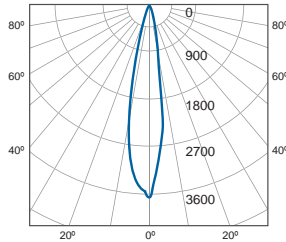


m	Lux	Ø cm
0.5	48000	7
1	12000	14
1.5	5333	21
2	3000	28

Beam angle = 8°



NEW

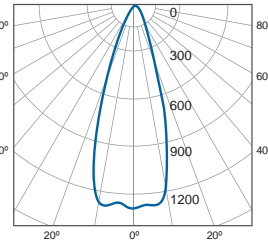


m	Lux	Ø cm
0.5	14400	21
1	3600	43
1.5	1600	64
2	900	85

Beam angle = 24°



NEW



m	Lux	Ø cm
0.5	5600	41
1	1400	83
1.5	622	124
2	350	166

Beam angle = 45°

Product Code

Product Code	Voltage (V)	Input Current (mA)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
ER1211-50H08D-G53-2800K-12V †	12	960	11	40000	12000	8	450	82	111	83	293	N/A	i
ER1211-50H08D-G53-4000K-12V †	12	960	11	40000	12000	8	450	85	111	83	293	N/A	i
ER1111-50H24D-G53-2800K-12V †	12	960	11	40000	3600	24	530	82	111	83	283	N/A	ii
ER1111-50H24D-G53-4000K-12V †	12	960	11	40000	3600	24	530	85	111	83	283	N/A	ii
ER1311-50H45D-G53-2800K-12V †	12	960	11	40000	1400	45	570	82	111	83	283	N/A	iii
ER1311-50H45D-G53-4000K-12V †	12	960	11	40000	1400	45	570	85	111	83	283	N/A	iii

† Preliminary data



LED REFLECTOR - Driven by LED Converter MR16

Excellent lighting performance with 100-1% linear dimming effect available

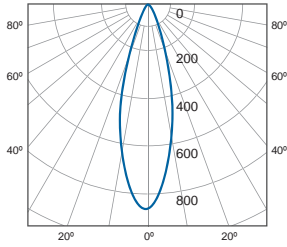
Empowered with patented Thermal Conductive Highway™ (TCH) technology, the MEGAMAN® LED MR16 reflectors in 8W and 10W deliver supreme light output of up to 2,800cd and are perfect substitutes for the 35W and 50W halogen respectively.

- Capable of linear dimming from 100% to 1%*
- Impressive lamp life of 30,000 hours reduces re-lamping costs
- High colour rendering of up to Ra85
- Colour temperature tolerance of only +/-100K
- High luminous maintenance – 90% of initial lumen can be achieved even at the end of lamp life
- Up to 80% energy savings
- Save more energy when lamp is dimmed
- Operating temperature: -30° to +40°
- LED constant current converter is needed*

* Please refer to page 9 for details of linear dimming technology and page 48 for details of the LED converter.



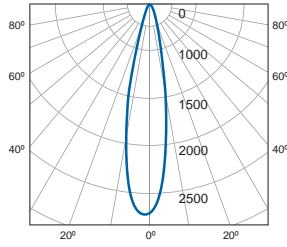
i 



m	Lux	Ø cm
0.5	3600	32
1	900	65
1.5	400	97
2	225	130

Beam angle = 36°

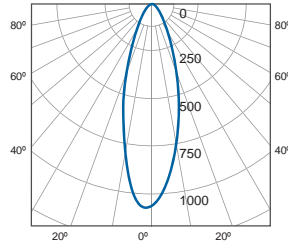
ii 



m	Lux	Ø cm
0.5	11200	21
1	2800	43
1.5	1244	64
2	700	85

Beam angle = 24°

iii 



m	Lux	Ø cm
0.5	4800	32
1	1200	65
1.5	533	97
2	300	130

Beam angle = 36°

Product Code	Voltage (V)	Input Current (mA)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Suggested LED Converter(s)	Product Photo
ER0408-35H36D-GU5.3-2800K	20	420	8	30000	900	36	400	82	50	74	105	100-1%*	1	i
ER0408-35H36D-GU5.3-4000K	20	420	8	30000	900	36	400	85	50	74	105	100-1%*	1	i
ER0510-50H24D-GU5.3-2800K	20	460	10	30000	2800	24	500	82	50	82	123	100-1%*	2, 3	ii
ER0510-50H24D-GU5.3-4000K	20	460	10	30000	2800	24	500	85	50	82	123	100-1%*	2, 3	ii
ER0510-50H36D-GU5.3-2800K	20	460	10	30000	1200	36	510	82	50	82	123	100-1%*	2, 3	iii
ER0510-50H36D-GU5.3-4000K	20	460	10	30000	1200	36	510	85	50	82	123	100-1%*	2, 3	iii

LED Converter



LD0108x1v-C420



LD0110x1v-C460



LD0210x1v-C460

* Please refer to page 9 for details of linear dimming technology and page 48 for details of the LED converter.



LED REFLECTOR - Driven by LED Converter

AR111

Excellent luminous intensity to provide best replacement for a traditional light source

Reaching a supreme luminous intensity, comparable to higher wattage metal halide and halogen equivalents, the MEGAMAN® LED AR111 series driven by LED converters is the flawless solution to replace 50W halogen and 20W metal halide by 10W and 16W versions.

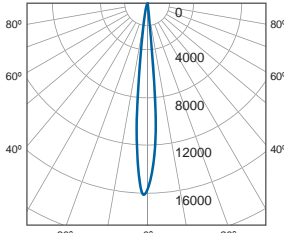
- Instant start capable – reaches the declared colour temperature at the time of switching on, while metal halides deliver greenish colour when starting up
- Hot re-strike capable
- Eliminates the risk of potential exposure to UV and radioactive Kr85 in case of lamp breakage
- Capable for linear dimming from 100% to 1%*
- Lifetime of 40,000 hours; 85% of initial lumen can be achieved even at the end of lamp life
- High colour rendering of up to Ra92
- High colour temperature consistency: tolerance is only +/-100K
- Operating temperature: -30° to +40°
- LED constant current converter is needed*

* Please refer to page 9 for details of linear dimming technology and page 48 for details of the LED converter.



DCI-10v
100-1%*

i



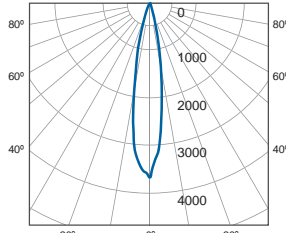
m	Lux	Ø cm
0.5	64000	7
1	16000	14
1.5	7111	21
2	4000	28

Beam angle = 8°



DCI-10v
100-1%*

ii



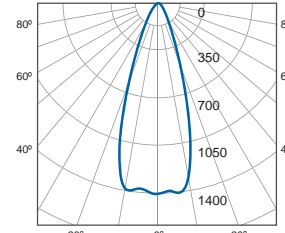
m	Lux	Ø cm
0.5	14400	21
1	3600	43
1.5	1600	64
2	900	85

Beam angle = 24°



DCI-10v
100-1%*

iii



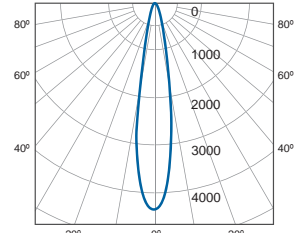
m	Lux	Ø cm
0.5	5600	41
1	1400	83
1.5	622	124
2	350	166

Beam angle = 45°



DCI-10v
100-1%*

iv



m	Lux	Ø cm
0.5	17600	21
1	4400	43
1.5	1956	64
2	1100	85

Beam angle = 24°

Product Code	Voltage (V)	Input Current (mA)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Suggested LED Converter(s)	Product Photo
ER0210-50H08D-G53-2800K	20	500	10	40000	16000	8	450	82	111	63	189	100-1%*	1	i
ER0210-50H08D-G53-4000K	20	500	10	40000	16000	8	450	85	111	63	189	100-1%*	1	i
ER0110-50H24D-G53-2800K	20	500	10	40000	3600	24	530	82	111	63	180	100-1%*	1	ii
ER0110-50H24D-G53-4000K	20	500	10	40000	3600	24	530	85	111	63	180	100-1%*	1	ii
ER0310-50H45D-G53-2800K	20	500	10	40000	1400	45	570	82	111	63	165	100-1%*	1	iii
ER0310-50H45D-G53-4000K	20	500	10	40000	1400	45	570	85	111	63	165	100-1%*	1	iii
ER0716-20M24D-GX8.5-2800K	20	770	16	40000	4400	24	800	85	111	79	232	100-1%*	2	iv
ER0716-20M24D-GX8.5-4000K	20	770	16	40000	4400	24	800	92	111	79	232	100-1%*	2	iv

LED Converter



LD0310x1v-C500



LD0116x1v-C770

* Please refer to page 9 for details of linear dimming technology and page 48 for details of the LED converter.



LED REFLECTOR - Driven by LED Converter

PAR30L

Superb lighting performance without the shortcomings of equivalent metal halide solutions

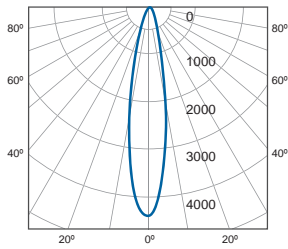
Employing patented Thermal Conductive Highway™ (TCH) technology, the LED PAR30L is optimised for a long lifetime of 40,000 hours to lower maintenance costs and provides the highest luminance comparable to its metal halide counterparts. It delivers desirable lighting performance of up to 4500cd with only 15W power consumption which is the best replacement for 20W metal halide.

- Instant start capable – reaches the declared colour temperature at the time of switching on, while metal halides deliver greenish colour when starting up
- Hot re-strike capable
- Eliminates the risk of potential exposure to UV and radioactive Kr85 in case of lamp breakage
- Capable for linear dimming from 100% to 1%*
- Lifetime 40,000 hours, which is 3 times longer than equivalent metal halides
- High colour rendering of up to Ra85
- After the end of lamp life, 85% of initial lumen can still be achieved
- High colour temperature consistency: tolerance is only +/-100K
- Save more energy consumption when lamp is dimmed
- Operating temperature: -30° to +40°
- LED constant current converter is needed*

* Please refer to page 9 for details of linear dimming technology and page 48 for details of the LED converter.



i



m	Lux	Ø cm
0.5	18000	22
1	4500	44
1.5	2000	67
2	1125	89

Beam angle = 25°

Product Code	Voltage (V)	Input Current (mA)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Suggested LED Converter(s)	Product Photo
ER0815-20M25D-E27-2800K	40	380	15	40000	4500	25	860	80	95	116	353	100-1%*	1	i
ER0815-20M25D-E27-4000K	40	380	15	40000	4500	25	860	85	95	116	353	100-1%*	1	i

LED Converter



LD0115x1v-C380

* Please refer to page 9 for details of linear dimming technology and page 48 for details of the LED converter.





LED NON-REFLECTOR

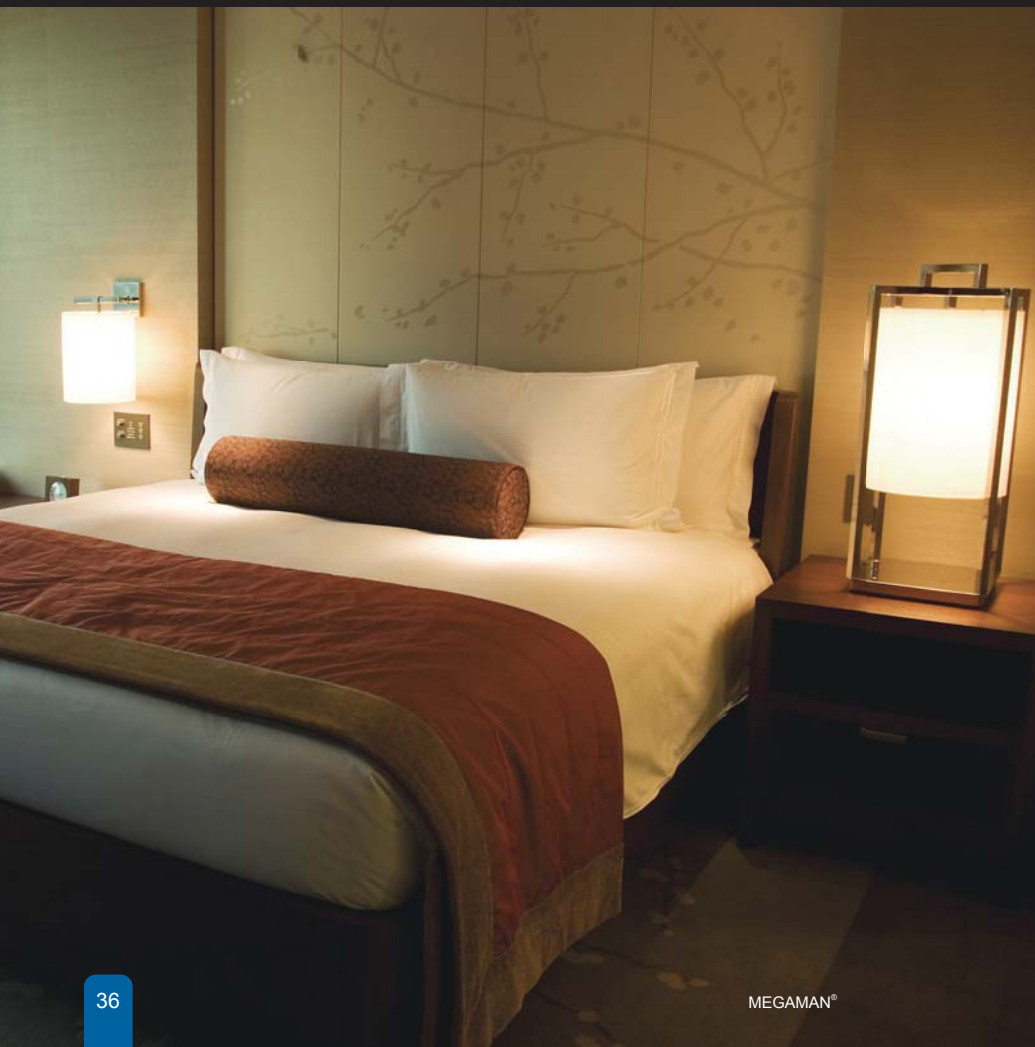
LED NON-REFLECTOR - Line Voltage CLASSIC

Light in weight, all rounded illumination with A60 lamp shapes

Thanks to the patented heat sink design, the MEGAMAN® LED CLASSIC minimises heat sink material for a glamorous and sleek classic shape with a compact housing. The LED CLASSIC delivers an even light distribution and classic feel just like an incandescent bulb, and is best for general lighting applications such as hotels, restaurants, offices, corridors, dining rooms and lounges.

- Ideal alternatives to the 60W incandescent bulbs
- Incredible light output up to 800lm with only 11W power consumption
- Even light distribution: 330° illumination
- Extremely light in weight
- Allows fitting into almost any lighting fixture
- Capable for linear dimming from 100% to 10%*
- Long lamp life of 35,000 hours, 35 times longer than incandescent bulbs
- High colour rendering of up to Ra85
- High colour temperature consistency: tolerance is only +/-100K
- Generates less heat than incandescent bulbs
- Operating temperature: -30° to +40°

* Please refer to page 9 for details.





i



ii

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Energy Label	Product Photo
LG0910d-E27-2800K-230V †	220-240	10	35000	600	82	60	123	99	100-10%*	Grade A	i
LG0910d-E27-4000K-230V †	220-240	10	35000	600	85	60	123	99	100-10%*	Grade A	i
LG0911d-E27-2800K-230V †	220-240	11	35000	800	82	60	123	99	100-10%*	Grade A	ii
LG0911d-E27-4000K-230V †	220-240	11	35000	800	85	60	123	99	100-10%*	Grade A	ii

* Please refer to page 9 for details.

† Preliminary data

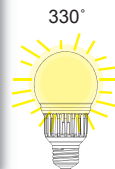
MEGAMAN® LED CLASSIC has an even light distribution of 330° illumination:



Other LED Lamp



MEGAMAN® LED CLASSIC



Please look at the wall and table surfaces. You can clearly see that the MEGAMAN® LED CLASSIC delivers an even light distribution of 330° illumination that effectively lights the upper area, table surface and the surroundings. However, the other LED bulb offers only 120° illumination, which lights up the upper area but leaves the table surface and its surroundings in darkness.

The MEGAMAN® LED CLASSIC gives a generic lighting effect similar to a traditional incandescent bulb, and is best for general lighting applications such as table lamps, bedside lamps, wall lamps and floor lamps.





SPECIAL



SPECIAL R9

The new power of innovation offers optimised colour rendition LED lamps for lighting food displays

The MEGAMAN® R9 series has been specifically designed to maximise the visual impact of meat, fresh fruit and vegetables by increasing the red colour rendition of the product. These lamps offer the same high quality light intensity and colour rendering of traditional halogen and metal halide lamps, but in a safer to control, more energy efficient format.*

- High red colour rendition (R9) value of ≥ 75
- Maximum colour rendering of up to Ra94
- Different lamp types are available to cater for different applications
- Instant start capable – reaches the declared colour temperature at the time of switching on, while metal halides deliver a greenish colour when starting up
- Hot re-strike capable
- Eliminates the risk of potential exposure to UV and radioactive Kr85 in case of lamp breakage
- Long lamp life of up to 30,000 hours
- High colour temperature consistency: tolerance is only $\pm 100\text{K}$
- Operating temperature: -30° to $+40^\circ$

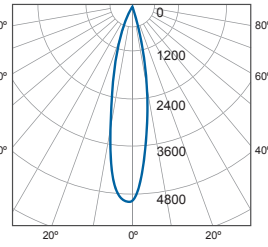
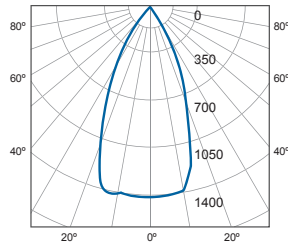
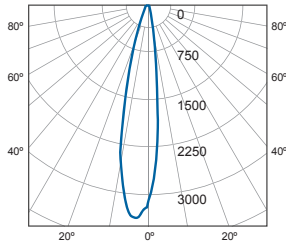
* Please refer to page 8 for details of the R9 technology.



i 

ii 

iii 



m	Lux	Ø cm
0.5	14400	21
1	3600	43
1.5	1600	64
2	900	85

Beam angle = 24°

m	Lux	Ø cm
0.5	5600	41
1	1400	83
1.5	622	124
2	350	166

Beam angle = 45°

m	Lux	Ø cm
0.5	20000	22
1	5000	44
1.5	2222	67
2	1250	89

Beam angle = 25°

Product Code	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Diameter (mm)	Length (mm)	Weight (g)	Dimming Format	Product Photo
LR0115R9-50H24D-GU10-2800K-230V †	220-240	15	30000	3600	24	530	94	111	94	245	N/A	i
LR0115R9-50H24D-GU10-4000K-230V †	220-240	15	30000	3600	24	530	94	111	94	245	N/A	i
LR0615R9-50H45D-GU10-2800K-230V †	220-240	15	30000	1400	45	570	94	111	94	230	N/A	ii
LR0615R9-50H45D-GU10-4000K-230V †	220-240	15	30000	1400	45	570	94	111	94	230	N/A	ii
LR0920R9-25M25D-E27-2800K-230V †	220-240	20	30000	5000	25	900	94	121	133	485	N/A	iii
LR0920R9-25M25D-E27-4000K-230V †	220-240	20	30000	5000	25	900	94	121	133	485	N/A	iii

† Preliminary data



SPECIAL MELLOTONE

Deliver harmonious illumination to create a warm and cosy environment

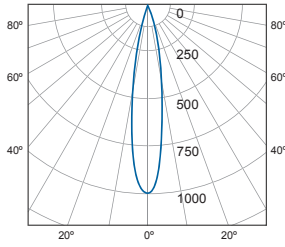
The MEGAMAN® MELLOTONE series is designed to deliver warm and harmonious illumination that creates the mood and sets the ambience.

When these lamps are used in a room with wooden wall panels or furniture, a comfortable and inviting environment is easily achieved. The MEGAMAN® MELLOTONE series is also popular for bakery lighting and presents a cosy shopping environment and vibrant pastries and breads.

- Deliver cosy and harmonious lighting: 2400K colour temperature
- Excellent colour rendering of up to Ra82
- High colour temperature consistency: tolerance is only +/-100K
- High luminous maintenance: 90% of initial lumen can be achieved even at the end of lamp life
- Long lamp life of up to 25,000 hours
- Different lamp types are available to cater for various applications
- Best for home and commercial applications such as family rooms, bedrooms, hotels, bakeries, restaurants, spas, antique stores and furniture stores etc
- Operating temperature: -30° to +40°



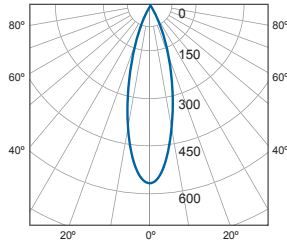
i



m	Lux	Ø cm
0.5	4000	21
1	1000	43
1.5	444	64
2	250	85

Beam angle = 24°

ii



m	Lux	Ø cm
0.5	2200	32
1	550	65
1.5	244	97
2	138	130

Beam angle = 36°

Product Code

Voltage	Input Current	Wattage	Lamp Life	Maximum Luminous Intensity	Beam Angle	Luminous Flux	CRI	Diameter	Length	Weight	Dimming Format	Product Photo
(V)	(mA)	(W)	(hrs)	(cd)	(°)	(lm)		(mm)	(mm)	(g)		

ER1006-35H24D-GU5.3-2400K-12V†

12 750 6 25000 1000 24 200 82 50 51 60 N/A i

ER1006-35H36D-GU5.3-2400K-12V†

12 750 6 25000 550 36 200 82 50 51 60 N/A ii

† Preliminary data



SPECIAL

CROWN SILVER

Flawless mirror lighting with an aesthetic touch

With a unique silver-plated design, this A60 shape LED lamp offers flawless lighting and adds an aesthetic touch to mirror lighting with its clear light bulb finishing.

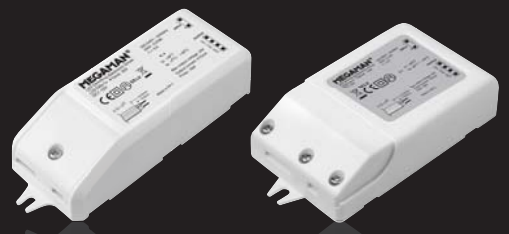
The MEGAMAN® LED CROWN SILVER delivers non-glare lighting just like incandescent lamps with a silver coating, while greatly reducing electricity and maintenance costs. When these lamps are fitted around a mirror frame or as decorative lighting, the light beam is well controlled and spectacular lighting can be easily achieved.

- Enhances the MEGAMAN® range of decorative LED lamps with added functionality
- Unique silver-plated design in A60 lamp shape with a silvered crown top and clear light bulb finishing
- Best for mirror lighting and decorative lighting
- Offers well controlled light source and non-glare lighting
- High colour rendering of up to Ra92
- Long lamp life of 30,000 hours
- High colour temperature consistency: tolerance is only +/-150K
- Generates much less heat than incandescent bulb
- Operating temperature: -30° to +40°



i

Product Code	Voltage	Wattage	Lamp Life	CRI	Diameter	Length	Weight	Dimming Format	Product Photo
	(V)	(W)	(hrs)		(mm)	(mm)	(g)		
LS0107-E27-2700K-230V	220-240	7	30000	85	60	106	135	N/A	i
LS0107-E27-4000K-230V	220-240	7	30000	92	60	106	135	N/A	i



LED CONVERTER



LED Converter – Constant Current

Tailor made for MEGAMAN® reflectors that are driven by LED constant current converters

- Offers a service life of 50,000 hours
- 100-1% dimming operation achievable with any common DC 1-10V dimmer
- Flicker-free operation with stable light output even with fluctuation of voltage supply
- Automatic restart capability when short-circuit or overload is absent
- Equipped with main harmonics reduced by an active harmonics filter
- Meets international standards for electromagnetic interference, which prevents disturbance to radio and medical equipment

LED Converter – Constant Current



i



ii

Product Code	Mains Input Voltage (V)	Input Voltage Range (V)	Output Voltage (V)	Lamp Wattage (W)	Output Current (mA)	Life Hour (hrs)	Power Factor (λ)	Maximum System Wattage (W)	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Lamps Supported	Product Photo
LD0108x1v-C420	120-240	120-240	DC20V	8	420	50000	>0.9	11	147	50	32	129	1	i
LD0110x1v-C460	120-240	120-240	DC20V	10	460	50000	>0.9	13	147	50	32	129	2, 3	i
LD0210x1v-C460	220-240	180-260	DC20V	10	460	50000	>0.5	13	116	55	25	96	2, 3	ii
LD0310x1v-C500	120-240	120-240	DC20V	10	500	50000	>0.9	13	147	50	32	133	4, 5, 6	i
LD0115x1v-C380	120-240	100-240	DC40V	15	380	50000	>0.9	20	147	50	32	133	7	i
LD0116x1v-C770	220-240	180-260	DC20V	16	770	50000	>0.9	21	147	50	32	133	8	i

Ambient temperature range (Ta): -30°C to +40°C
 Maximum casing temperature (Tc): 85°C
 Push-in terminals: 0.75mm to 1.5mm
 Wire preparation: 8mm
 Fixing bracket for screws: M4
 Luminaires of protection class: Class II
 With open circuit, short circuit and over loaded protections

Lamps Supported



ER0408-35H36D-GU5.3-2800K
 ER0408-35H36D-GU5.3-4000K



ER0510-50H24D-GU5.3-2800K
 ER0510-50H24D-GU5.3-4000K



ER0510-50H36D-GU5.3-2800K
 ER0510-50H36D-GU5.3-4000K



ER0110-50H24D-G53-2800K
 ER0110-50H24D-G53-4000K



ER0210-50H08D-G53-2800K
 ER0210-50H08D-G53-4000K



ER0310-50H45D-G53-2800K
 ER0310-50H45D-G53-4000K



ER0815-20M25D-E27-2800K
 ER0815-20M25D-E27-4000K



ER0716-20M24D-GX8.5-2800K
 ER0716-20M24D-GX8.5-4000K



LED Converter – Constant Voltage

Apart from working with halogen transformers, LED reflectors in AC / DC 12V can work with a constant voltage converter

- Tailor made for MEGAMAN® reflectors that are driven by halogen transformers
- Offers a service life of 50,000 hours
- Flicker-free operation with stable light output even with fluctuation of voltage supply
- Automatic restart capability when short-circuit or overload is absent
- Equipped with main harmonics reduced by an active harmonics filter
- Meets international standards for electromagnetic interference, which prevents disturbance to radio and medical equipment

LED Converter – Constant Voltage



i

Product Code	Mains Input Voltage (V)	Input Voltage Range (V)	Output Voltage (V)	Maximum Lamp Wattage (W)	Output Current (mA)	Life Hour (hrs)	Power Factor (λ)	Maximum System Wattage (W)	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Lamps Supported	Product Photo
LD0106-K12 †	220-240	180-260	DC12V	6	500	50000	0.4	8	100	45	25	64	1, 2, 3, 4	i

Ambient temperature range (Ta): -10°C to +40°C
 Maximum casing temperature (Tc): 85°C
 Push-in terminals: 0.75mm to 1.5mm
 Wire preparation: 8mm
 Fixing bracket for screws: M4
 Luminaires of protection class: Class II
 With open circuit , short circuit and over loaded protections

† Preliminary data

Lamps Supported



ER1006-35H24D-GU5.3-2800K
 ER1006-35H24D-GU5.3-4000K



ER1006-35H36D-GU5.3-2800K
 ER1006-35H36D-GU5.3-4000K



ER1006-35H24D-GU5.3-2400K

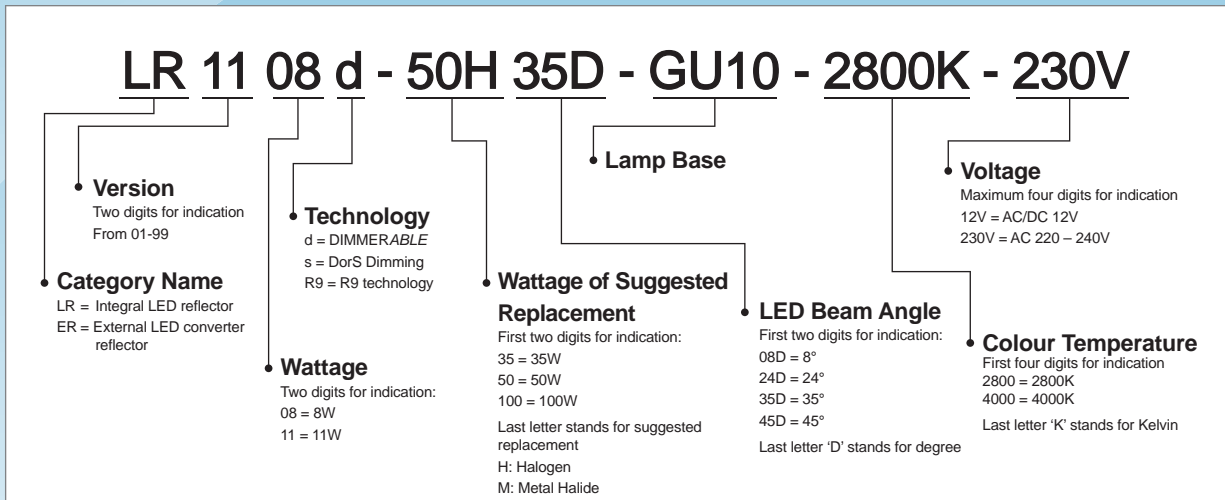


ER1006-35H36D-GU5.3-2400K

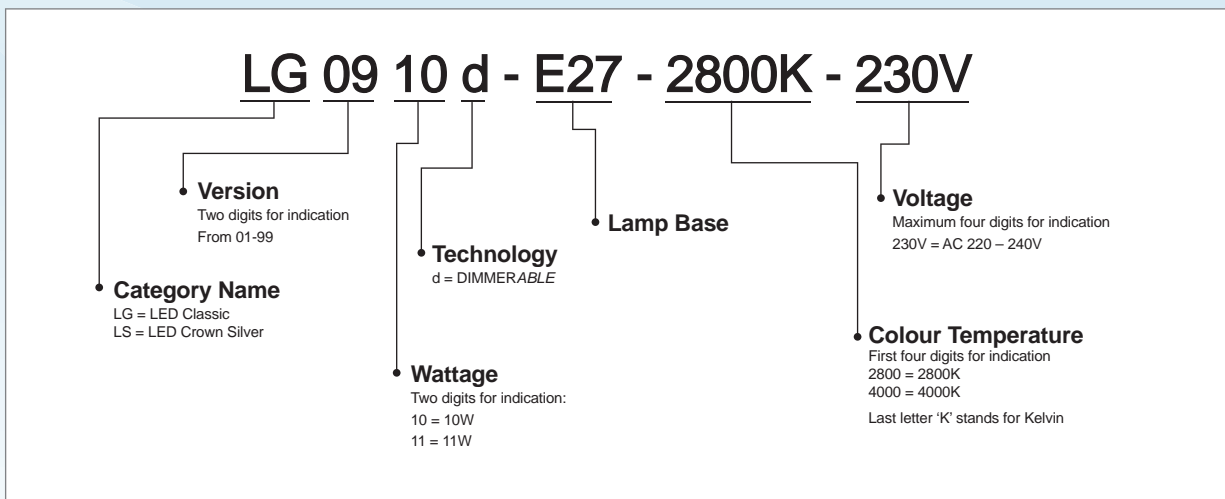
NOMENCLATURE

Decoding the MEGAMAN® Product Code

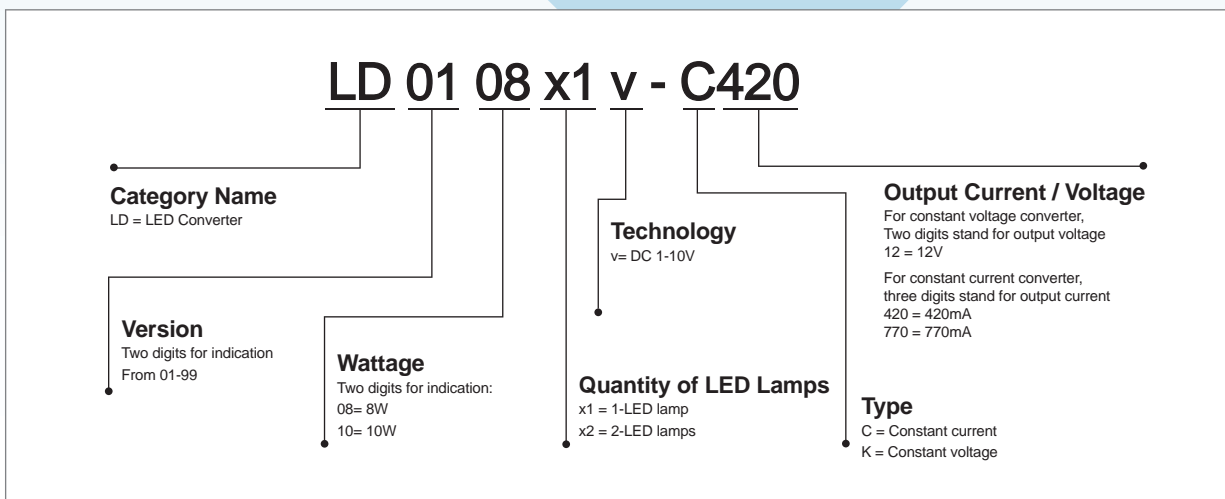
Nomenclature of LED Reflector Lamp



Nomenclature of LED Non-Reflector Lamp



Nomenclature of LED Converters



ENERGY SAVING TIPS

MEGAMAN® lamps are designed to help you conserve energy and save money, which in turn reduces CO₂ emission. Let's see how much energy and money can be saved and CO₂ can be reduced when switching to MEGAMAN®.

Total Cost of Ownership (TCO) after 25,000 hours

Example: 7W LED PAR16 vs. 35W Halogen PAR16

Lamp Type	MEGAMAN® LED PAR16	Halogen PAR16
Wattage (W)	7	35
Average Lamp Life (hrs)	25,000	3,000
Relamping Interval	Every 25,000 hrs	Every 3,000 hrs
Estimated Wholesale Price after 25,000 hrs (US\$)	55	63 (\$7 x 9)
Maintenance Costs after 25,000 hrs	0	80 (relamping at 8 times x \$10 / lamp)
Energy Costs after 25,000 hrs (US\$)	35	175
Total Cost of Ownership (US\$)	90	318
Total Savings for 1 light point (US\$)	228	-----
Breakeven Time (hrs)	4,882 (approx. 6 months)	-----

Using one MEGAMAN® lamp in this case can help reduce up to 431kg of CO₂ emission after 25,000 hours.

Calculation Formulas:

- Energy Costs = wattage x operating hours x electricity costs / 1,000
- Total Cost of Ownership (TCO) = lamp costs + relamping costs + energy costs
- Breakeven Time* (h) is derived when the TCO of MEGAMAN® LED is equal to halogen:

$$\text{LED lamp costs} + \text{wattage} \times \text{h} \times \text{electricity costs} / 1,000 = \text{halogen lamp costs} \times (\text{h} / \text{halogen lamp life}) + \text{relamping costs} \times (\text{h} / \text{halogen lamp life}) + \text{wattage} \times \text{h} \times \text{electricity costs} / 1,000$$
- CO₂ Emission = wattage x operating hours x 0.616 / 1,000

Assumptions:


























- Electricity Costs = US\$0.2 kWh
- 1kWh = 0.616kg of CO₂ emission
- Calculations for air-conditioning costs have been excluded.
- Above lamp costs are based on estimated wholesale price and are for reference only.

* Please visit www.led.megaman.cc for the calculations



LED LAMPS VS. TRADITIONAL LAMPS

Reflector Lamp

<p>PAR16 35°</p>  <p>Halogen PAR16</p>	 <p>LR0407-35H35D</p>  <p>LR1107s-35H35D</p> <p>35W</p>	 <p>LR0408-50H35D</p>  <p>LR1108d-50H35D</p> <p>50W</p>
<p>PAR20 30°</p>  <p>Halogen PAR20</p>	 <p>LR0308-50H30D LR0308s-50H30D</p> <p>50W</p>	<p>PAR30 24°</p>  <p>Halogen PAR30</p>  <p>LR0215-100H24D LR0215s-100H24D</p> <p>100W</p>
<p>PAR30L 25°</p>  <p>Metal Halide PAR30L</p>	 <p>ER0815-20M25D</p> <p>20W</p>	<p>PAR38 30°</p>  <p>Halogen PAR38</p>  <p>LR0915-75H30D LR0915s-75H30D</p> <p>75W</p>
<p>PAR38 25°</p>  <p>Metal Halide PAR38</p>	 <p>LR0920-25M25D</p> <p>25W</p>	<p>PAR38 45°</p>  <p>Metal Halide PAR38</p>  <p>LR0920-25M45D</p> <p>25W</p>
<p>AR111 8°</p>  <p>Halogen AR111</p>	 <p>ER0210-50H08D</p>  <p>ER1211-50H08D</p>  <p>LR0815-50H08D</p> <p>50W</p>	<p>AR111 45°</p>  <p>Halogen AR111</p>  <p>ER0310-50H45D</p>  <p>ER1311-50H45D</p>  <p>LR0615-50H45D</p> <p>50W</p>

LED LAMPS VS. TRADITIONAL LAMPS

Reflector Lamp

AR111 24°



ER0716-20M24D

20W



Metal Halide AR111

AR111 24°



LR0110-35H24D
LR0110s-35H24D

35W



Halogen AR111



ER0110-50H24D



ER1111-50H24D



LR0115-50H24D

50W

MR16 24°



ER1006-35H24D

35W



Halogen MR16



ER0510-50H24D

50W

MR16 36°



ER1006-35H36D



ER0408-35H36D

35W



Halogen MR16



ER0510-50H36D

50W

Non-Reflector Lamp

Classic A60



LG0910d



LG0911d

40W



Incandescent A60

60W

LIGHTING DESIGN SOFTWARE



MEGAMAN® offers a free and complete lighting design program to help you design various indoor and outdoor lighting schemes. The program includes an electronic catalogue with data sheets, product search function and specifications for management of luminaires and lamps. A photometric database is also included to provide comprehensive results when configuring lighting arrangements. The latest photometric data can also be found on our website.

Please visit www.megaman.cc and select the lighting design software icon to download the most up-to-date plugins and photometric information.

PROFESSIONAL LIGHTING DESIGN SOFTWARE

OxyTech

RELUX
light simulation tools

DIALux

PRODUCT MASTER LIST

LED REFLECTOR

Product Code	Description	Voltage (V)	Input Current (mA)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Dimming Format	LED Converter [^] / Halogen Transformer [#]	Page No.
ER0110-50H24D-G53-2800K	AR111	DC 20V	500	10	40000	3600	24	530	82	100 -1%*	7	30
ER0110-50H24D-G53-4000K	AR111	DC 20V	500	10	40000	3600	24	530	85	100 -1%*	7	30
ER0210-50H08D-G53-2800K	AR111	DC 20V	500	10	40000	16000	8	450	82	100 -1%*	7	30
ER0210-50H08D-G53-4000K	AR111	DC 20V	500	10	40000	16000	8	450	85	100 -1%*	7	30
ER0310-50H45D-G53-2800K	AR111	DC 20V	500	10	40000	1400	45	570	82	100 -1%*	7	30
ER0310-50H45D-G53-4000K	AR111	DC 20V	500	10	40000	1400	45	570	85	100 -1%*	7	30
ER0408-35H36D-GU5.3-2800K	MR16	DC 20V	420	8	30000	900	36	400	82	100 -1%*	2	28
ER0408-35H36D-GU5.3-4000K	MR16	DC 20V	420	8	30000	900	36	400	85	100 -1%*	2	28
ER0510-50H24D-GU5.3-2800K	MR16	DC 20V	460	10	30000	2800	24	500	82	100 -1%*	3, 6	28
ER0510-50H24D-GU5.3-4000K	MR16	DC 20V	460	10	30000	2800	24	500	85	100 -1%*	3, 6	28
ER0510-50H36D-GU5.3-2800K	MR16	DC 20V	460	10	30000	1200	36	510	82	100 -1%*	3, 6	28
ER0510-50H36D-GU5.3-4000K	MR16	DC 20V	460	10	30000	1200	36	510	85	100 -1%*	3, 6	28
ER0716-20M24D-GX8.5-2800K	AR111	DC 20V	770	16	40000	4400	24	800	85	100 -1%*	5	30
ER0716-20M24D-GX8.5-4000K	AR111	DC 20V	770	16	40000	4400	24	800	92	100 -1%*	5	30
ER0815-20M25D-E27-2800K	PAR30L	DC 40V	380	15	40000	4500	25	860	80	100 -1%*	4	32
ER0815-20M25D-E27-4000K	PAR30L	DC 40V	380	15	40000	4500	25	860	85	100 -1%*	4	32
NEW ER1006-35H24D-GU5.3-2400K-12V†	MR16	12	750	6	25000	1000	24	200	82	N/A	1, a	42
ER1006-35H24D-GU5.3-2800K-12V	MR16	12	750	6	25000	1300	24	240	82	N/A	1, a	24
ER1006-35H24D-GU5.3-4000K-12V	MR16	12	750	6	25000	1300	24	240	85	N/A	1, a	24
NEW ER1006-35H36D-GU5.3-2400K-12V†	MR16	12	750	6	25000	550	36	200	82	N/A	1, a	42
ER1006-35H36D-GU5.3-2800K-12V	MR16	12	750	6	25000	600	36	240	82	N/A	1, a	24
ER1006-35H36D-GU5.3-4000K-12V	MR16	12	750	6	25000	600	36	240	85	N/A	1, a	24
NEW ER1111-50H24D-G53-2800K-12V †	AR111	12	960	11	40000	3600	24	530	82	N/A	a	26
NEW ER1111-50H24D-G53-4000K-12V †	AR111	12	960	11	40000	3600	24	530	85	N/A	a	26
NEW ER1211-50H08D-G53-2800K-12V †	AR111	12	960	11	40000	12000	8	450	82	N/A	a	26
NEW ER1211-50H08D-G53-4000K-12V †	AR111	12	960	11	40000	12000	8	450	85	N/A	a	26
NEW ER1311-50H45D-G53-2800K-12V †	AR111	12	960	11	40000	1400	45	570	82	N/A	a	26
NEW ER1311-50H45D-G53-4000K-12V †	AR111	12	960	11	40000	1400	45	570	85	N/A	a	26

[^] LED Converter : 1. LD0106-K12 2. LD0108x1v-C420 3. LD0110x1v-C460 4. LD0115x1v-C380 5. LD0116x1v-C770 6. LD0210x1v-C460 7. LD0310x1v-C500

[#] Halogen Transformer: a. common AC/DC 12V transformers

LED CLASSIC

Product Code	Description	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Luminous Flux (lm)	CRI	Dimming Format	Energy Label	Page No.
NEW LG0910d-E27-2800K-230V †	A60	220-240	10	35000	600	82	100 -10%*	Grade A	36
NEW LG0910d-E27-4000K-230V †	A60	220-240	10	35000	600	85	100 -10%*	Grade A	36
NEW LG0911d-E27-2800K-230V †	A60	220-240	11	35000	800	82	100 -10%*	Grade A	36
NEW LG0911d-E27-4000K-230V †	A60	220-240	11	35000	800	85	100 -10%*	Grade A	36

† Preliminary data

* Please refer to Page 9 for details of the dimming solutions.

[^] Please refer to Page 46 for details of the LED converter.

[#] Please visit www.megaman.cc/RHT for a list of recommended halogen transformers.

PRODUCT MASTER LIST

LED REFLECTOR

Product Code	Description	Voltage (V)	Wattage (W)	Lamp Life (hrs)	Maximum Luminous Intensity (cd)	Beam Angle (°)	Luminous Flux (lm)	CRI	Dimming Format	Page No.
LR0110-35H24D-GU10-2800K-230V	AR111	220-240	10	30000	2500	24	300	85	N/A	20
LR0110-35H24D-GU10-4000K-230V	AR111	220-240	10	30000	2500	24	300	92	N/A	20
LR0110s-35H24D-GU10-2800K-230V	AR111	220-240	10	30000	2500	24	300	85	4-Step*	20
LR0110s-35H24D-GU10-4000K-230V	AR111	220-240	10	30000	2500	24	300	92	4-Step*	20
LR0115-50H24D-GU10-2800K-230V	AR111	220-240	15	30000	3600	24	530	82	N/A	20
LR0115-50H24D-GU10-4000K-230V	AR111	220-240	15	30000	3600	24	530	85	N/A	20
NEW LR0115R9-50H24D-GU10-2800K-230V †	AR111	220-240	15	30000	3600	24	530	94	N/A	40
NEW LR0115R9-50H24D-GU10-4000K-230V †	AR111	220-240	15	30000	3600	24	530	94	N/A	40
LR0115s-50H24D-GU10-2800K-230V	AR111	220-240	15	30000	3600	24	530	82	4-Step*	20
LR0115s-50H24D-GU10-4000K-230V	AR111	220-240	15	30000	3600	24	530	85	4-Step*	20
LR0215-100H24D-E27-2800K-230V	PAR30	220-240	15	30000	3200	24	530	85	N/A	16
LR0215-100H24D-E27-4000K-230V	PAR30	220-240	15	30000	3200	24	530	92	N/A	16
LR0215s-100H24D-E27-2800K-230V	PAR30	220-240	15	30000	3200	24	530	85	4-Step*	16
LR0215s-100H24D-E27-4000K-230V	PAR30	220-240	15	30000	3200	24	530	92	4-Step*	16
LR0308-50H30D-E27-2800K-230V	PAR20	220-240	8	25000	1600	30	430	82	N/A	14
LR0308-50H30D-E27-4000K-230V	PAR20	220-240	8	25000	1600	30	430	85	N/A	14
LR0308s-50H30D-E27-2800K-230V	PAR20	220-240	8	25000	1600	30	430	82	4-Step*	14
LR0308s-50H30D-E27-4000K-230V	PAR20	220-240	8	25000	1600	30	430	85	4-Step*	14
LR0407-35H35D-E14-2800K-230V	PAR16	220-240	7	25000	600	35	270	85	N/A	12
LR0407-35H35D-E14-4000K-230V	PAR16	220-240	7	25000	600	35	270	92	N/A	12
LR0407-35H35D-GU10-2800K-230V	PAR16	220-240	7	25000	600	35	270	85	N/A	12
LR0407-35H35D-GU10-4000K-230V	PAR16	220-240	7	25000	600	35	270	92	N/A	12
LR0408-50H35D-GU10-2800K-230V	PAR16	220-240	8	25000	900	35	330	80	N/A	12
LR0408-50H35D-GU10-4000K-230V	PAR16	220-240	8	25000	900	35	330	82	N/A	12
LR0615-50H45D-GU10-2800K-230V	AR111	220-240	15	30000	1400	45	570	82	N/A	20
LR0615-50H45D-GU10-4000K-230V	AR111	220-240	15	30000	1400	45	570	85	N/A	20
NEW LR0615R9-50H45D-GU10-2800K-230V †	AR111	220-240	15	30000	1400	45	570	94	N/A	40
NEW LR0615R9-50H45D-GU10-4000K-230V †	AR111	220-240	15	30000	1400	45	570	94	N/A	40
LR0815-50H08D-GU10-2800K-230V	AR111	220-240	15	30000	16000	8	450	82	N/A	20
LR0815-50H08D-GU10-4000K-230V	AR111	220-240	15	30000	16000	8	450	85	N/A	20
LR0915-75H30D-E27-2800K-230V	PAR38	220-240	15	30000	2200	30	630	85	N/A	18
LR0915-75H30D-E27-4000K-230V	PAR38	220-240	15	30000	2200	30	630	92	N/A	18
LR0915s-75H30D-E27-2800K-230V	PAR38	220-240	15	30000	2200	30	630	85	4-Step*	18
LR0915s-75H30D-E27-4000K-230V	PAR38	220-240	15	30000	2200	30	630	92	4-Step*	18
LR0920-25M25D-E27-2800K-230V	PAR38	220-240	20	30000	6800	25	1200	82	N/A	18
LR0920-25M25D-E27-4000K-230V	PAR38	220-240	20	30000	6800	25	1200	85	N/A	18
NEW LR0920-25M45D-E27-2800K-230V†	PAR38	220-240	20	30000	2200	45	1100	82	N/A	18
NEW LR0920-25M45D-E27-4000K-230V†	PAR38	220-240	20	30000	2200	45	1100	85	N/A	18
NEW LR0920R9-25M25D-E27-2800K-230V †	PAR38	220-240	20	30000	5000	25	900	94	N/A	40
NEW LR0920R9-25M25D-E27-4000K-230V †	PAR38	220-240	20	30000	5000	25	900	94	N/A	40
LR1107s-35H35D-GU10-2800K-230V	PAR16	220-240	7	25000	600	35	270	85	4-Step*	12
LR1107s-35H35D-GU10-4000K-230V	PAR16	220-240	7	25000	600	35	270	92	4-Step*	12
LR1108d-50H35D-GU10-2800K-230V	PAR16	220-240	8	25000	900	35	380	80	100 -10%*	12
LR1108d-50H35D-GU10-4000K-230V	PAR16	220-240	8	25000	900	35	380	82	100 -10%*	12
LR1305-30D-GX53-2800K-230V	GX53	220-240	5	30000	850	30	350	82	N/A	22
LR1305-30D-GX53-4000K-230V	GX53	220-240	5	30000	850	30	350	85	N/A	22
LR1305-60D-GX53-2800K-230V	GX53	220-240	5	30000	350	60	350	82	N/A	22
LR1305-60D-GX53-4000K-230V	GX53	220-240	5	30000	350	60	350	85	N/A	22

† Preliminary data

* Please refer to page 9 for details of the linear dimming solutions. Compatible dimmer list for the LR1108d-50H35D is available at www.megaman.cc/LEDdimmers.

PRODUCT MASTER LIST

LED Crown Silver

LED Converter

Product Code	Description	Voltage (V)	Wattage (W)	Lamp Life (hrs)	CRI	Dimming Format	Page No.
LS0107-E27-2700K-230V	CROWN SILVER	220-240	7	30000	85	N/A	44
LS0107-E27-4000K-230V	CROWN SILVER	220-240	7	30000	92	N/A	44

Product Code	Type	Mains Input Voltage (V)	Input Voltage Range (V)	Output Voltage (V)	Lamp Wattage (W)	Output Current (mA)	Life Hour (hrs)	Power Factor (λ)	Maximum System Wattage (W)	LED Lamps Supported [^]	Page No.
LD0106-K12 †	Constant Voltage	220-240	180-260	DC 12V	6	500	50000	0.4	8	1	50
LD0108x1v-C420	Constant Current	120-240	120-240	DC 20V	8	420	50000	>0.9	11	2	48
LD0110x1v-C460	Constant Current	120-240	120-240	DC 20V	10	460	50000	>0.9	13	3	48
LD0115x1v-C380	Constant Current	120-240	100-240	DC 40V	15	380	50000	>0.9	20	4	48
LD0116x1v-C770	Constant Current	220-240	180-260	DC 20V	16	770	50000	>0.9	21	5	48
LD0210x1v-C460	Constant Current	220-240	180-260	DC 20V	10	460	50000	>0.5	13	3	48
LD0310x1v-C500	Constant Current	120-240	120-240	DC 20V	10	500	50000	>0.9	13	6	48

[^]LED lamps supported: 1. ER1006-35H24D and ER1006-35H36D 2. ER0408-35H36D 3. ER0510-50H24D and ER0510-50H36D
4. ER0815-20M25D 5. ER0716-20M24D 6. ER0110-50H24D, ER0210-50H08D and ER0310-50H45D

† Preliminary data

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