

Product Information

MegaZENI LED Series 15W/25W/50W

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[Applications]

Up to now, energy savings in lighting were hardly possible without compromising on the quality of the light. What's more, a single LED was not enough for challenging applications such as spotlights, downlights or street lighting. The problem with multiple LEDs, however, is that they take up a lot more space and are thus more difficult to control. But now the high-intensity MegaZENI LED lighting modules from Sharp offer a compact, cost-efficient solution to these problems. MegaZENIs combine the energy efficiency, lifetime and reliability benefits of LEDs with the luminous power levels of traditional lighting solutions. Moreover, the fact that the light-emitting surface and ceramic substrate of a Sharp MegaZENI are the same size in all wattage classes is convenient for the design of luminaires. This means Sharp MegaZENIs are ideal for applications such as:

- General lighting/illumination
- Indoor lighting, e.g. spot/downlight, recessed ceiling light fixtures
- Outdoor lighting, e.g. street, subway, station or bridge lighting, object illumination

[Main features]

- Multiple-chip LED with only two terminal connections for easy installation
- Compact high-flux and -density light source
- Uniform, high-quality illumination
- CRI of up to 93
- Luminous flux (typ.) of up to 1,550 lm (I_f 400mA/ V_f 37V), 2,600 lm (I_f 700mA/ V_f 37V) and 4,880 lm (I_f 950mA/ V_f 50V)
- Luminous efficacy of up to 105 lm/W
- ENERGY STAR® compliant/MacAdam 3 applicable (option)
- Same size LES and ceramic substrate in all wattage classes
- Dimensions: 24 x 20 mm
- Long lifetime: 40,000 hrs at 90° operating temperature (on package)
- Operating temperature range: -30° to +100° C.
- Six different colour temperatures

[Benefits]

- Combines an extremely bright with a very high quality of light
- Compact and cost-efficient: thin and lightweight 24 x 20 mm module
- Suitable for a whole series of luminaires with different levels of brightness but with identical reflectors, lenses and housing shells thanks to same-sized LES and ceramic substrate
- Directly mounted onto the heat sink – requires no further insulation
- Unique ceramic substrate for efficient thermal management
- Excellent heat dissipation thanks to the flat surface of the ceramic substrate
- Low heat resistance for efficient thermal management
- Fail-safe operation and lowest possible thermal radiation thanks to serial/parallel matrix LED array

[Colour options/MegaZENI LED lighting modules line-up]

MegaZENI 15W Series



Rth (j-c)=2.8K/W

Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI		Luminous efficacy [lm/W]	
			X	Y		(min.) [Ra]	(typ.) [Ra]		
GW5DGA27M04	CRI 90+	Warm white	2,700	0.464	0.418	1,150	90	93	78
GW5DGA30M04		Warm white	3,000	0.435	0.403	1,170	90	93	79
GW5DGA35M04		Natural white	3,500	0.409	0.393	1,200	90	93	81
GW5DGA40M04		Natural white	4,000	0.381	0.383	1,230	90	92	83
GW5DGA50M04		Pure white	5,000	0.346	0.360	1,250		90	84
GW5DGA65M04		Cool white	6,500	0.313	0.332	1,250		90	84
GW5DMA27M04	CRI 80+	Warm white	2,700	0.464	0.418	1,350	80	83	91
GW5DMA30M04		Warm white	3,000	0.435	0.403	1,400	80	83	95
GW5DMA35M04		Natural white	3,500	0.409	0.393	1,450	80	83	98
GW5DLA40M04		Natural white	4,000	0.381	0.383	1,520	80	82	103
GW5DLA50M04		Pure white	5,000	0.346	0.360	1,550	80	82	105
GW5DLA65M04		Cool white	6,500	0.313	0.332	1,550	80	82	105

at 400 mA and 37V

MegaZENI 25W Series



Rth (j-c)=2K/W

Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI		Luminous efficacy [lm/W]	
			X	Y		(min.) [Ra]	(typ.) [Ra]		
GW5DGC27M04	CRI 90+	Warm white	2,700	0.464	0.418	1,910	90	93	74
GW5DGC30M04		Warm white	3,000	0.435	0.403	1,950	90	93	75
GW5DGC35M04		Natural white	3,500	0.409	0.393	1,970	90	93	76
GW5DGC40M04		Natural white	4,000	0.381	0.383	2,050	90	92	79
GW5DGC50M04		Pure white	5,000	0.346	0.360	2,080		90	80
GW5DGC65M04		Cool white	6,500	0.313	0.332	2,080		90	80
GW5DMC27M04	CRI 80+	Warm white	2,700	0.464	0.418	2,300	80	83	89
GW5DMC30M04		Warm white	3,000	0.435	0.403	2,370	80	83	92
GW5DMC35M04		Natural white	3,500	0.409	0.393	2,450	80	83	95
GW5DLC40M04		Natural white	4,000	0.381	0.383	2,550	80	82	98
GW5DLC50M04		Pure white	5,000	0.346	0.360	2,600	80	82	100
GW5DLC65M04		Cool white	6,500	0.313	0.332	2,600	80	82	100

at 700 mA and 37V

NEW MegaZENI 50W Series



Rth (j-c)=0.9K/W

Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI		Luminous efficacy [lm/W]	
			X	Y		(min.) [Ra]	(typ.) [Ra]		
GW5DGE27MR5	CRI 90+	Warm white	2,700	0.458	0.410	3,590	90	93	76
GW5DGE30MR5		Warm white	3,000	0.434	0.403	3,670	90	93	77
GW5DGE35MR5		Natural white	3,500	0.407	0.392	3,740	90	93	79
GW5DGE40MR5		Natural white	4,000	0.382	0.380	3,850	90	92	81
GW5DGE50MR5		Pure white	5,000	0.350	0.362	3,900		90	82
GW5DGE65MR5		Cool white	6,500	0.317	0.336	3,900		90	82
GW5DME27MR5	CRI 80+	Warm white	2,700	0.458	0.410	4,300	80	83	91
GW5DME30MR5		Warm white	3,000	0.434	0.403	4,430	80	83	93
GW5DME35MR5		Natural white	3,500	0.407	0.392	4,580	80	83	96
GW5DLE40MR5		Natural white	4,000	0.382	0.380	4,770	80	82	100
GW5DLE50MR5		Pure white	5,000	0.350	0.362	4,880	80	82	103
GW5DLE65MR5		Cool white	6,500	0.317	0.336	4,880	80	82	103

at 950 mA and 50V

Subject to alterations and modifications.

For comprehensive product information please refer to the product specifications.

SHARP

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