

# Product Information

## LED Lighting Modules (15W / 25W MegaZENI Series)

Status: May 2011



### [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 conventional lighting. That makes them 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 ( $I_f$  400 mA/ $V_f$  37 V) or 2,600 lm ( $I_f$  700 mA/ $V_f$  37 V)
- Luminous efficacy of up to 105 lm/W
- ENERGY STAR® compliant/MacAdam 3 applicable (option)
- Dimensions: 24 x 20 mm
- Long lifetime: 40,000 hrs at 80° 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
- Directly mounted onto the heat sink – requires no further insulation
- Excellent thermal dissipation thanks to the flat surface of the ceramic substrate
- Low thermal resistance for efficient thermal management
- Fail-safe operation and lowest possible thermal radiation thanks to series/parallel matrix LED array

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







## MegaZENI 15W Series **NEW**



Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI (min.) (typ.)		Luminous efficacy [lm/W]
			X	Y		[Ra]	[Ra]	
GW5DMA27M04	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

\* versions available first







## MegaZENI 15W Series **NEW**

Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI (min.) (typ.)		Luminous efficacy [lm/W]
			X	Y		[Ra]	[Ra]	
GW5DGA27M04	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

\* versions available first







## MegaZENI 25W Series **NEW**



Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI (min.) (typ.)		Luminous efficacy [lm/W]
			X	Y		[Ra]	[Ra]	
GW5DMC27M04	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

\* versions available first

## MegaZENI 25W Series **NEW**

Model number	LED colour	Colour temp. [K]	Colour range coordinates (CIE 1931)		Luminous flux (typ.) [lm]	CRI (min.) (typ.)		Luminous efficacy [lm/W]
			X	Y		[Ra]	[Ra]	
GW5DGC27M04	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

\* versions available first

Subject to alterations and modifications.  
For comprehensive product information please refer to the product specifications.

# SHARP

Sharp Microelectronics Europe a division of Sharp Electronics (Europe) GmbH  
Sonninstraße 3 | 20097 Hamburg | Germany | Tel.: +49-18 05-07 35 07 | Fax: +49-40-23 76 22 32 | [www.sharpleds.eu](http://www.sharpleds.eu)

\*Calls cost € 0.14 per minute from German landlines and no more than € 0.42 per minute from the German mobile network.