

# Accessories Selection Guide

## LED Lighting Modules Optics

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### [Why the right accessories are important]

To turn a ZENIGATA or MiniZENI LED lighting module from Sharp into a lighting fixture or luminaire with the desired beam shape, you need suitable optical accessories that focus and direct the rays of light in the right direction. Typically, an LED requires a specific optical component perfectly attuned to its mechanical and light-emitting characteristics that takes the application into account. The multi-chip structure of the multi-chip ZENIGATA and MiniZENI LEDs means correct collimation is all the more important. If an LED is used as a spotlight for a medical application, e.g. in operating room lighting, the reflector-lens combination needs to focus the light on a specific point, and the light beam should not be blurred at the edges. A soft cut-off lens, in contrast, will distribute the light over a wider area, providing an ideal option for residential lighting applications.

### [What accessories you need]

The optical accessories you require include: diffusers, reflectors, single or multiple lenses, and single lenses with a holder. The shape of the LED beam corresponding to the spot depends on the type of optic chosen. The use of a lens, for example, diffuses the distribution of light for a narrow, medium or wide beam. Lenses deliver good homogeneity while simultaneously protecting the LED against contamination.

### [Our recommended partners]

Sharp works closely with three reputed manufacturers of optical accessories: Diffractive Optics, IDEALED and LEDIL. For a brief outline of these companies, see below; for more details, please refer to their website.

- **Diffractive Optics Ltd.**, a Hong Kong-based company with over 15 years of sound experience in precision lens design and manufacturing, ideally equipped to meet the growing demand for precision optical systems and components ([www.diffractive-optics.com](http://www.diffractive-optics.com)).
- **IDEALED.it**, an Italian company formed several years ago, specialises in "innovative lighting technology" for a wide range of general lighting applications and customised solutions ([www.ideal.it](http://www.ideal.it)).
- **LEDIL**, a Finnish company with many years of experience in semiconductor optics, specialising in high-quality optics for leading LED manufacturers. LEDIL strives to offer the "best possible optical components for semiconductors: optically efficient, visually pleasing and mechanically well-engineered solutions" ([www.ledil.com](http://www.ledil.com)).

The list overleaf features details on the accessories available for ZENIGATA and MiniZENI LED lighting modules – arranged by component and recommended partner.

# ZENIGATA



Lenses, diffusers and holders	Application	Dimensions (ø x h in mm)	Beam angle (°)	Holder colour	Material	Fastening	Partner
	General lighting	35 x 16.7	30	Wh./ Transp.	PC optics	Fit in to holder	IDEAL ED.IT www.ideal ed.it
	General lighting	35 x 16.7	60	Wh./ Transp.	PC optics	Fit in to holder	
	General lighting	38 x 20	60	White	PC	Fit in	
	General lighting	38 x 20	60	Transparent	PC	Fit in	
	General lighting	38 x 18.2/18.5	25 x 40/30/40	White/W/O	PC	Glue	Diffractive Optics LTD. www.diffractive-optics.com
	General lighting	40 x 20.8/24.5	25 x 40/30/40	White/W/O	PC	Screw	
	General lighting	45 x 1.6	5		PC	Glue	
	General lighting	45 x 18.5	30		PMMA	Glue	
	General lighting	47 x 20.54	30		PC	Screw	
	General lighting	50 x 2	5		PC	Glue	

Reflectors	Application	Dimensions (ø x h in mm)	Beam angle (°)	Holder colour	Material	Fastening	Partner
	General lighting	45 x 19.5/23.4	30/36/40		PC	Screw	Diffractive Optics LTD. www.diffractive-optics.com
	General lighting	50 x 25.1/50	30/36/60 x 60		PC	Screw	
	General lighting	65 x 17.5/18.5	70		PC	Screw	
	General lighting	75 x 70	60 x 60		PC	Screw	

# Encapsulated ZENIGATA

Reflectors and holders	Application	Dimensions (ø x h in mm)	Beam angle (°)	Holder colour	Material	Fastening	Partner
	General lighting / Spotlight	31.5 x 14	90	N/A	PA 12 optical plastic	N/A	IDEAL ED.IT www.ideal ed.it

# MiniZENI



Lenses, diffusers and holders	Application	Dimensions (ø x h in mm)	Beam angle (°)	Holder colour	Material	Fastening	Partner
	General lighting	28 x 14/14.5	20/30/40/20 x 40	Black	PMMA	Glue	Diffractive Optics LTD. www.diffractive-optics.com
	General lighting	31 x 14.5	20 x 40	Black	PC	Screw	
	General lighting	35 x 2	5		PC	Glue	
	General lighting	50 x 15.4	30		PMMA	Glue	
	General lighting	35 x 16.7 mm	30	Wh./ Transp.	PC optics	Fit in to holder	IDEAL ED.IT www.ideal ed.it
	General lighting	38 x 20 mm	30	White	PC	Glue	
	General lighting	38 x 20 mm	30	Transparent	PC	Glue	

Reflectors	Application	Dimensions (ø x h in mm)	Beam angle (°)	Holder colour	Material	Fastening	Partner
	General lighting	35 x 19.5	20/30/40		PC	Screw	Diffractive Optics LTD. www.diffractive-optics.com
	General lighting	45 x 21.1	30		PC	Screw	
	General lighting	50 x 26.8	30		PC	Screw	
	Spotlight	22.6	±12/±18/±28.5	No holder	Metallised PC	Glue	LEDIL www.ledil.fi

Subject to alterations and modifications  
For detailed information and more accessories, please refer to the partner's website.

# 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.sharpsme.com

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