



THE PROMISE OF A BRIGHTER TOMORROW

SPECTRA street lighting solutions

MIC Electronics Limited, an ISO 9001:2000 certified organisation, is a global leader in the design, development and manufacturing of LED Video Displays. After acquiring expertise in LED-based technologies, MIC has enhanced its business model, and has made a foray into Lighting Solutions. Having recognized LED as the technology of the future, almost two decades ago, MIC is all set to revolutionize the lighting industry.

Driving Innovation has been the core of all activities at MIC. Our innovative thinking has resulted in providing high efficiency lighting systems which deliver quality power through efficient circuit design, maintenance of optimum junction temperature with an effective heat sink design system, and an efficient distribution of light facilitated by design optics, resulting in products that will provide a host of benefits to the end-user.



The future of lighting is green.

As an organisation that aspires to revolutionise the future, MIC understands its responsibility towards nature. In all its endeavours, the environment is of high priority. This was one of the prime reasons why MIC chose to embrace LED technology for their lighting solutions.

LED, unlike conventional lighting sources is characterised by lesser heat emissions and does not release any toxic discharge (like Mercury from tube lights) on disposal. Hence, the transition from conventional lighting to LED will have a profound impact on the environment, for the better. By shifting to LED, users cut down on their power consumption, which will augment their carbon credits.

MIC is committed to make your future brighter, safer and more economical.



Spectra Street Lighting Solutions. For a brighter tomorrow.

MIC's Spectra series is the future of street lighting. The range has been designed keeping in mind the factors that could affect road visibility and driving. Using LEDs, the Spectra series offers sufficient lighting intensity for motorists to see distinctively without the use of full beam or dipped headlights. Therefore, it ensures comfort and safety that can only be bettered by day light. The Spectra series is characterised by low power consumption, robust construction and low overall operating costs.

The Future is Brighter: Spectra street light series, powered by high power LEDs, offers higher luminous efficiency and better design. Unlike conventional lighting systems, these are flicker-free and operate with low noise.

The Future is Safer: Spectra street light series works on wide voltage bands (100-240 V) with low heat radiation, completely resistant to shock and impact, and non-polluting, thus making it very eco-friendly.

The Future is More Economical: Switching to Spectra street

lighting systems results in savings of upto 50% in power costs. With a longer life of over 50,000 hours, along with dimming options for increased power efficiency and zero-maintenance, the savings are aplenty.

Construction and Aesthetics

The lamp casing is made of Pressure Die-cast Aluminium alloy and the cover is of high-quality toughened glass. The entire set is assembled into a single unit by stainless steel fasteners.

The housing is silver coloured and processed with electrostatic spraying using Fluoro Carbon Powder giving it an excellent smooth surface finish, thus rendering it with a self-cleaning property.

The Spectra series comes in a **wide range** and occupies space in applications involving Public Lighting like street lights, open spaces, perimeter lights, platform lights and parking lot lights.

The Spectra series of street lights can be offered for specific requirements, with a special lens design which will facilitate reduction in the number of street light poles and luminaires, without compromising on the quality of light output.

The Spectra series conforms to • EMI Test Specification Standard - CISPR 22, Class A for Both CE & RE emission type • High Energy Surge Test Standard - IEC 61000-4-5 • Electrostatic Discharge Standard - IEC 61000-4-2 • Electrical Fast Transient (EFT) Susceptibility Standard - IEC 61000-4-4

The Optional Features of Spectra • Micro Controller-based light control • Ambient Light Sensor (Auto ON / OFF Switching) • Auto dimming for power saving • With/Without Optics

SPECTRA – ELECTRICAL SPECIFICATIONS

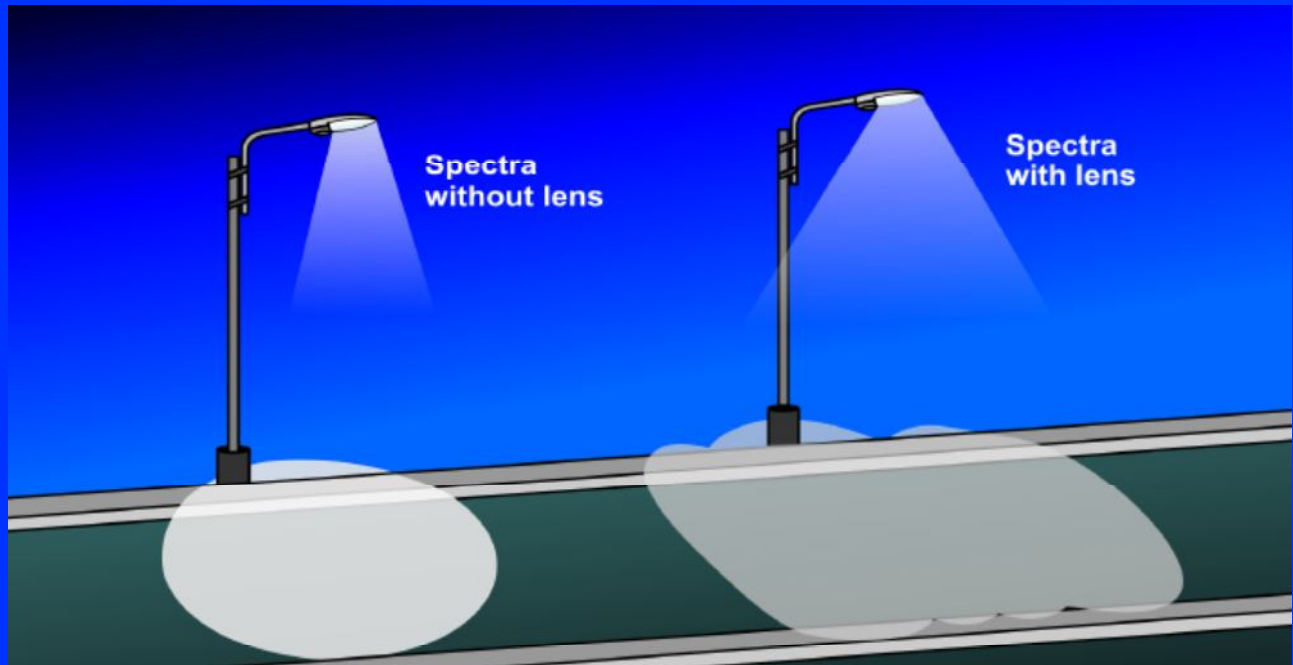
Parameters / Model*	Spectra Alpha	Spectra Aster	Spectra Corona	Spectra Juniper	Spectra Omega
Equivalent HID/FTL Luminaire	40W FTL	70W MH	150W MH	250W MH / HPSV	400W HPSV
MIC CAT REF	MLOS -18 - W	MLOS - 36 - W	MLOS - 60 - W	MLOS - 90 - W	MLOS - 120 - W
Light Source	High Power White LED	High Power White LED	High Power White LED	High Power White LED	High Power White LED
LED Power	18W	36W	60W	90W	120W
LED Lumens	1620 lm	3240 lm	5400 lm	8100 lm	10800 lm
Beam Angle	120°	120°	120°	120°	120°
Colour Temperature	5000 ~ 7000 °K	5000 ~ 7000 °K	5000 ~ 7000 °K	5000 ~ 7000 °K	5000 ~ 7000 °K
Input Voltage Range	100 - 265 V AC	100 - 265 V AC	100 - 265 V AC	100 - 265 V AC	100 - 265 V AC
Input Frequency	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz	47 ~ 63 Hz
Power Factor	> 0.9 lag	> 0.9 lag	> 0.9 lag	> 0.9 lag	> 0.9 lag

* All models are available with lens option. To order for a model with lens, suffix "L" to the catalogue Ref. No. [for a 60W with lens, the Ref. No. will be MLOS-60-WL]

SPECTRA – MECHANICAL SPECIFICATIONS

Parameters / Model	Spectra Alpha	Spectra Aster	Spectra Corona	Spectra Juniper	Spectra Omega
MIC CAT REF	MLOS -18 - W	MLOS - 36 - W	MLOS - 60 - W	MLOS - 90 - W	MLOS - 120 - W
Construction of Casing	Die-Cast Aluminum	Die-Cast Aluminum	Die-Cast Aluminum	Die-Cast Aluminum	Die-Cast Aluminum
Weight (approx.)	3.3 Kg	3.3 Kg	7.8 Kg	7.8 Kg	7.8 Kg
Finish	Powder Coating (Silver Colour)	Powder Coating (Silver Colour)	Powder Coating (Silver Colour)	Powder Coating (Silver Colour)	Powder Coating (Silver Colour)
Dimensions L x W x T	356 mm x 200 mm x 64 mm	356 mm x 200 mm x 64 mm	510 mm x 310 mm x 64 mm	510 mm x 310 mm x 64 mm	510 mm x 310 mm x 64 mm
IP Level	IP 65	IP 65	IP 65	IP 65	IP 65
Installation Tube Dia	34.4 mm to 42.4 mm	34.4 mm to 42.4 mm	54.3 mm to 60.3 mm	54.3 mm to 60.3 mm	54.3 mm to 60.3 mm
Recommended Mounting Height	4 meters	6 meters	8 meters	10 meters	11 meters

Spectra Series - with lens impact



This image is created for demonstrative purpose only

The Advantages of Spectra with lens

- Increase in area of illumination along the length of the road (62% approximately)
- Increased **spacing** between poles, and hence reduced number of poles and light fittings
- Reduced total power consumption
- Reduced maintenance costs





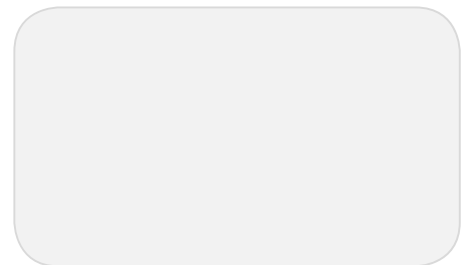
Spectra Ray – Solar Lighting Solutions

The ongoing fight to protect the earth against the effects of global warming has made the industry maintain high focus on innovation in renewable energy sources. MIC has been at the forefront in developing Lighting Solutions that use solar energy.

The Spectra Ray series addresses the issues of lighting, not only in spaces where there is lack of or no access to grid power, but also in the conventional city roads and projects. The green solutions offered by MIC are eco-friendly and would play a major role in catapulting the users to the zenith in terms of eco-friendliness and cost savings.

MIC's Spectra Ray series is developed in conjunction with MNRE (Ministry of New and Renewable Energy) guidelines. Details will be provided on request. Please contact our nearest branch office.

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Due to continuous innovation and improvement, MIC Electronics Limited reserves the right to make changes in data / details without prior notice.

MIC Solid State Lighting Solutions. Unleashing the power of LEDs.