



**Slim Design LED Street Light Fixtures with the Highest Standard
Energy-Saving Performance in the Industry
The Commercial Launch of LEGA
Joint Development by GS Yuasa and Sharp**

GS Yuasa Corporation (Tokyo Stock Exchange: 6674, "GS Yuasa") has developed LED street light fixtures with Sharp Corporation (Tokyo Stock Exchange: 6753, "Sharp"). The jointly-developed LED street light fixtures will be exhibited at the Highway Techno Fair 2011 to be held at Tokyo Big Sight on October 27th and 28th (Thursday and Friday), 2011. GS Yuasa aims to start sales in January 2012 and has set a sales target of 10,000 fixtures for 2012.

As needs for energy savings in street lighting continue to grow following the Great East Japan Earthquake, GS Yuasa has leveraged its track record and technological capabilities in optimal light distribution design and outdoor light fixture design together with Sharp's experience in LED lighting with high-performance optical design technology to successfully commercialize LED street light fixtures that have the highest standard energy-saving performance (low wattage) in the industry through a joint development project. These fixtures provide energy savings of approximately 70% compared with traditional mercury lamps and savings of approximately 40% compared with high-pressure sodium vapor lamps.

The adoption of the unique lens that has been developed will enable a thinner shape, and the resulting smaller pressure receiving area will act to both improve safety and contribute to the creation of a new and refined street landscape.

In September 2011, the Ministry of Land, Infrastructure, Transport and Tourism announced a draft of guidelines aimed at energy saving for LED street and tunnel lighting and the reduction of maintenance expenses.^{*1} Accordingly, it is expected that the adoption of LED lamps for street lighting will increase in the future as our society makes efforts to use less carbon-based fuels. GS Yuasa will continue to contribute to energy savings and the reduction of our society's burden on the environment through the development of high-quality products that fulfill market needs in the LED street lighting sector.

Features:

1. Energy savings

These fixtures provide energy savings of approximately 70% compared with traditional 400-watt mercury lamps and approximately 40% compared to high-pressure 180-watt sodium vapor lamps through a proprietary design lens that provides light distribution performance that is optimal for street lighting.^{*2}

2. Slim design

Higher quality optics (reduction of glare) and a slim design have been achieved through the development and adoption of a unique flat-form lens.

3. Long life

The long-life design provides 60,000 hours of lighting, five times that of mercury lamps and 2.5 times that of high-pressure sodium vapor lamps, significantly reducing the need for maintenance.

4. Lightning-induced surge protection feature

Because lightning-induced surges can pass through power lines and cause outdoor LED light fixtures to break down, a high-performance lightning-induced surge protection feature has

been equipped to prevent these types of accidents.

5. Initial luminance control function

The electricity consumption has been reduced by cutting the initial excessive brightness of the fixtures through a luminance control function that automatically maintains brightness at a fixed level throughout the life of the fixtures.

6. Luminance level function

Further energy saving is achieved through a function that allows different levels of luminance for different time periods, such as late at night when traffic volume is low.

*1: LED Street and Tunnel Lighting Adoption Guidelines (Draft)

*2: From a comparison of average power using initial luminance control

Specifications for LEGA LED street light fixtures

External dimensions (mm)	Length	680		
	Width	380		
	Height	164		
Mass (kg)		Approximately 10		
Light source		High efficiency LED		
Color temperature (k)		5,400		
Product type		1cd/m ²	0.7cd/m ²	0.5cd/m ²
Luminous flux (lm)		11,600	9,250	5,250
Electricity consumption (W)		Average 120	Average 95	Average 56
Light source life (time)		60,000		
Lightning-induced surge protection feature		15kV (common mode)		
Suggested retail price (tax included)		Open price		

*The above figures are provisional figures from October 2011 and may change in the future.

Sales targets

2012: 10,000 fixtures

2013: 15,000 fixtures

2014: 20,000 fixtures

Image

LEGA LED street light fixture

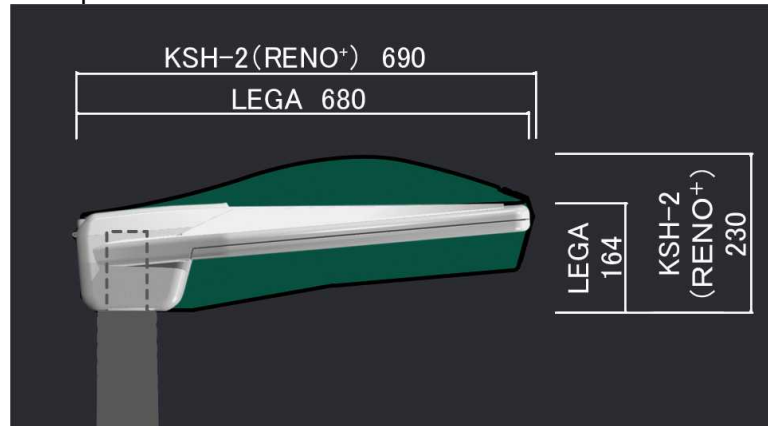


Slim design (compared with traditional fixtures)

Comparison with KSC-4



Comparison with KSC-2



	KSC-4	KSC-2	LEGA
Pressure receiving area (face)	0.17m ²	0.11m ²	0.06m ²

(Reference)

KSC-4 and KSC-2: These are light fixture (HID) formats that are used in street lighting equipment as described in the Street and Tunnel Lighting Equipment Specifications issued by the Association of Electricity and Telecommunication Engineering for Land and Infrastructure.

RENO+: GS Yuasa product that supports the KSC-2 format