

DK-LED120 (SELF-CONTAINED LED Marine Lantern)

◆ FEATURES

- High intensity, self-contained marine LED lantern
- One integrated unit containing both Solar module and Lithium-ion Battery
- High performance 1-Tier LED Module for simple installation and maintenance
- Efficient heat sink for optimal temperature control
- Remote control monitoring via RS-232 Data Port & GPS synchronization (Optional)

◆ SPECIFICATIONS

- Body Material : Injection Molded Nylon with fiberglass
- LED Module : 1-Tier POWER LEDs
- Color(IALA Standard) : White, Red, Green, Yellow, Blue
- Lens : Clear Acrylic Lenses
- Vertical Divergence : $\pm 5^\circ$ at 50% Peak
- Visibility : 360° Horizon (Omnidirectional)
- Flash Characters : Up to 256 standard Flash codes
- Power Consumption : 3W / 5W
- Input Voltage : 3.7 VdC ($\pm 10\%$)
- Solar Panel : 6VdC/10W (4 panels)
- Battery Voltage : 3.7VdC/18Ah Lithium-ion Battery
- Synchronization : GPS receiver
- Data Port : RS-232
- Operation Temperature : -30°C to $+60^\circ\text{C}$
- Nominal Range : 3NM / 5NM
- Fixed Intensity :

Color	DK-LED120-3	DK-LED120-5
White	25 cd	110 cd
Red	25 cd	110 cd
Green	25 cd	110 cd
Yellow	25 cd	110 cd
Blue	25 cd	110 cd



◆ INSTALLATIONS

- Buoys, danger marks, low range navigation buoys

※ Note: Specifications are subject to change.

DK-LED200 (LED Marine Lantern)

◆ FEATURES

- High performance 1-Tier LED Module for simple installation and maintenance
- Efficient heat sink for optimal temperature control
- Remote control monitoring via RS-232 Data Port & GPS synchronization

◆ SPECIFICATIONS

- Body Material : Injection Molded Nylon with fiberglass
- LED Module : 1-Tier POWER LEDs
- Color (IALA Standard) : White, Red, Green, Yellow
- Lens : Clear Acrylic Lenses
- Vertical Divergence : $\pm 5^\circ$ at 50% Peak
- Visibility : 360° Horizon (Omnidirectional)
- Flash Characters : Up to 256 standard Flash codes
- Power Consumption : Under 24W (12VdC)
- Input Voltage : 10 ~ 14 VdC
- Operation Temperature : -30°C to +60°C
- Nominal Range : 7NM to 8NM
- Fixed Intensity :

White	Red	Green	Yellow
400 cd	500 cd	450 cd	400 cd



◆ INSTALLATIONS

- Buoys, Lighthouses, Seaberth Tower, Port/Harbors, Docks, Channel Markings, Seawall, Danger marks, Offshore structure, Fixed structure

※ Note: Specifications are subject to change.

DK-LED200HI (LED Marine Lantern)

◆ FEATURES

- High performance 1-Tier LED Module for simple installation and maintenance
- Efficient heat sink for optimal temperature control
- Remote control monitoring via RS-232 Data Port & GPS synchronization

◆ SPECIFICATIONS

- Body Material : Injection Molded Nylon with fiberglass
- LED Module : 1-Tier POWER LEDs
- Color (IALA Standard) : White, Red, Green, Yellow
- Lens : Clear Acrylic Lenses
- Vertical Divergence : $\pm 5^\circ$ at 50% Peak
- Visibility : 360° Horizon (Omnidirectional)
- Flash Characters : Up to 256 standard Flash codes
- Power Consumption : Under 30W (12VdC)
- Input Voltage : 10 ~ 14 VdC
- Operation Temperature : -30°C to +60°C
- Nominal Range : 8NM to 9NM
- Fixed Intensity :

White	Red	Green	Yellow
700 cd	700 cd	900 cd	800 cd



◆ INSTALLATIONS

- Buoys, Lighthouses, Seaberth Tower, Port/Harbors, Docks, Channel Markings, Seawall, Danger marks, Offshore structure, Fixed structure

※ Note: Specifications are subject to change.

DK-LED300 (LED Marine Lantern)

◆ FEATURES

- High performance LED Module for simple installation and maintenance
- Efficient heat sink for optimal temperature control
- Remote control monitoring via RS-232 Data Port & GPS synchronization

◆ SPECIFICATIONS

- Body Material : Injection Molded Nylon with fiberglass
- LED Module : POWER LEDs
- Lens : Acrylic precision-moulded Fresnel lens
- Color (IALA Standard) : White, Red, Green, Yellow
- Vertical Divergence : $\pm 4^\circ$ at 50% Peak
- Visibility : 360° Horizon (Omnidirectional)
- Flash Pattern : Up to 256 standard Flash codes
- Power Consumption : Under 60W (12VdC)
- Input Voltage : 10 ~ 14 VdC
- Operation Temperature : -30°C to $+60^\circ\text{C}$
- Nominal Range : 11NM to 13NM
- Fixed Intensity :

White	Red	Green	Yellow
6,500 cd	3,500 cd	4,000 cd	3,500 cd



◆ INSTALLATIONS

- Lighthouses, Seaberth Tower, Port/Harbors, Docks, Channel Markings, Seawall, Danger marks, Offshore structure, Fixed structure

※ Note: Specifications are subject to change.

DK-LED350 (LED marine lantern)

◆ FEATURES

- High performance omni-directional LED beacon for simple installation and maintenance.
- Efficient heat sink for optimal temperature control.
- Multiple tiers up to 6 tiers for high intensity.
- Integrated flasher with day light switch.
- Remote status monitoring and control via RS-232 Port.
- GPS synchronization.

◆ SPECIFICATIONS

- Body Material : Aluminum.
- Color (IALA Standard) : White, Red, Green, Yellow.
- Lens : Clear Acrylic Lenses.
- Vertical Divergence : $\pm 4^\circ$ at 50% Peak
- Flash characters : Up to 256 standard Flash codes
- Input Voltage : 10 ~ 14 VdC
- Temperature range : -30°C to +60°C
- Nominal visibility Ranges : 13NM to 16NM
- Fixed intensity(Cd)

Tiers	White	Red	Green	Yellow
2	10,000	6,000	6,000	6,000
4	20,000	12,000	12,000	12,000
6	30,000	18,000	18,000	18,000



◆ INSTALLATIONS

- Lighthouses, Seaberth tower, Port/Harbors, Docks, Fixed structure

※ Note: Specifications are subject to change.

DKRB-400 (Marine Signal Lantern)

◆ FEATURES

- For use of long range(or medium) at land fall light and lateral system of marking at the entrance of breakwater to cover strong back light on city or plant.
- Configuration in the various of flashing characteristic can be made with 4,6,8 panel lens with the blanking panel to cover single or double flashing and Alternating Light.

◆ SPECIFICATIONS

- Lens Type & configuration : Acrylic Fresnel Lense, Rectangle, Hexagonal, Octagonal
- Lens Configuration : Rectangle, 4 Plane, 90°-90°-90°-90°
Hexagonal, 6 Plane, 60°-60°-60°-60°-60°-60°
Octagonal, 8 Plane, 45°-45°-45°-45°-45°-45°-45°-45°
- Lens Focal Distance : 200mm
- Fixed Intensity : 3,000,000 cd (220V 400W Metal Halide Lamp with Hexagonal)
500,000 cd (220V 150W Metal Halide Lamp with Hexagonal)
240,000 cd (DC 12V 100W Halogen Lamp with Hexagonal)
- Effective Intensity : 1,200,000 cd (220V 400W 1RPM / 6 Plane)
220,000 cd (220V 150W 1RPM / 6 Plane)
49,000 cd (DC 12V 100W 1RPM / 6 Plane)
- Luminous Range : 25NM (220V 400W 1RPM / 6 Plane)
22NM (220V 150W 1RPM / 6 Plane)
18NM (DC 12V 100W 1RPM / 6 Plane)
- Rotation Speed : 0.5-2 RPM
- Power Source : DC 12V / AC 220V
- Motors : PWM controlled, Direct Drive DC motor(Gearless, Brushless).
- Electronic control unit
 - Microprocessor controlled, user-friendly control panel.
 - Remote status monitoring and controll.
 - Compact, lightweight.
- Net weight : Marine signal lantern(110kg), Electronic control unit(32kg)
- Size : Marine signal lantern(Φ630mm x 1,100mm(H))
Electronic control unit (400mm x 270mm x 600mm (W x D x H))



DKRB-400 (Marine Signal Lantern)

◆ Characteristic

- Rotating : Turn Table is made with Direct Drive DC motor(Gearless, Brushless) and dual motor driver without any noise, it's configuration is two independent driver unit for security and long life time.
- Flashing characteristic and rotation speed :
Selection by user 0.5 – 2 RPM(adjustable).
can be made in the various flashing characteristic with blanking panel.
Lens in available with white, red, green, yellow colors.
- Remote control monitoring : can be monitored the operation status like as rotation speed, lamp's on/off(by RS-232C)
- Power Source : AC or DC in available with photovoltaic panel.
- Location to install : Land fall light, manned lighthouse, unmanned lighthouse, breakwater, etc



White 6 panel



Red 6 panel



Green 6 panel



Yellow 6 panel



Altemating Light 4 panel
(use blanking panel)



Double flashing 8 panel
(use blanking panel)

- Specifications subject to change or variation without notice.

DKRB-400

Long range Rotating Beacon

Features

- High performance Direct Drive Motor(brushless, Gearless)
- Available flash characters : F15 ~ F120, adjustable.
- Available lens : White, Red, Green, Yellow.
- Remote monitoring and control.
- RS-232 Communication port.

Applications

- Landfall light, Mark headlands, Entrance to ports.

Specifications

- Lenses : High efficiency acrylic Fresnel lenses.
- Optical arrays : Tetragonal.
Hexagonal.
Octagonal.
- Vertical divergence : $\pm 4^\circ$.
- Rotation speed : 0.5 ~ 2RPM.
- Input voltage : DC 12V $\pm 10\%$.
AC 220V $\pm 10\%$.
- Nominal visibility ranges : Up to 25NM.
- Temperature range : $-20^\circ\text{C} \sim +60^\circ\text{C}$.



Fixed intensity

Fixed intensity(Cd)	Color	DC 12V		AC 220V	
		50W	100W	150W	400W
	White	150,000	240,000	500,000	3,000,000
	Red	45,000	72,000	90,000	
	Green	45,000	72,000	90,000	
	Yellow	97,500	156,000	325,000	

- Specifications subject to change or variation without notice.

DKRB-LED400

Long range Rotating LED Beacon

Features

- High performance Direct Drive Motor(Brushless, Gearless)
- Available flash characters : FI5s ~ FI20s, adjustable.
- Available Colors : White.
- Remote monitoring and control.
- RS-232 Communication port.

Applications

- Mark territorial, Mark headlands, Entrance to ports.

Specifications

- Lenses : High efficiency acrylic Fresnel lenses.
- Optical arrays : Triangular.
Tetragonal.
Hexagonal
- Vertical divergence : 2°
- Horizontal divergence : 2°
- Speed of revolution : 0.5 ~ 2RPM.
- Fixed Intensity : 320,000cd
- Effective Intensity : 210,000cd @ 1RPM
- Nominal visibility ranges : Up to 22NM.
- Power input voltage : DC 12V ± 10%..
- Power consumption : Less then 100W.
- Operation temperature : -30°C ~ +60°C.



- Specifications subject to change or variation without notice.