CR CONTROL SYSTEMS

"Light Waves To The World"

SERIES CR6000 MARINE BEACONS

CR6300 LED Self-Contained Marine Beacon

Our CR6000 Series LED Self-Contained Marine Beacons offer 2-6 miles visibility. They are available as either standalone externally powered, or self contained/solar powered LED lanterns that are low maintenance, complete bolt-on light packages designed for the extreme conditions encountered by marine aids to navigation on buoys, fixed structures, windmills, oil platforms, etc. They are designed to meet and exceed the requirements of U.S. Coast Guard Specifications 506 for buoys and fixed structures.

GPS flash synchronization of multiple beacons and Automatic Identification System (AIS) are available as options. AIS is a worldwide system that allows information exchange between ocean vessels and between ATONs increasing situational awareness. The system can also be used to monitor ATONs in a given area from a land based station.

The patented side emitter lens provides superior uniformity in the horizontal plane with excellent symmetry.

SPECIFICATIONS:

• All of our beacons meet federal standards for private aids to navigation as per 33 CFR 66 and 67

• One High wattage LED rated for in excess of 100,000 hours is mounted onto a large heat sink allows the LED to run more temperately, thus enabling its long life

• High efficiency side emitting cast acrylic lens and lens cover are unaffected by UV radiation

• Integrated carry handles

• Infrared (IR) remote control capability for editing and light data reporting using standard RCA remote control (optional). Lantern accepts simple 3 digit code entries from remote control which elicit prompt coded responses from beacon.

• Rhythms: 252 selectable by IR remote control plus 4 additional spaces available for custom rhythms programmable by factory or IR remote control.

• IR Edit Functions: Rhythm, Light Intensity and Storage Mode and many others

• IR Read Functions: Prompt coded light responses for rhythm, light intensity, battery voltage both present, and lowest voltage logged from previous night

• LED driver circuit utilizes pulse width modulation (PWM) providing a high efficiency, temperature compensated constant current drive system to power the LED

• Quiescent Current: Very low 0.71mA in operating mode, 0.6mA storage mode

• Daylight control sensor - day/night activation

• GPS synchronization of multiple beacons (optional)

• Various battery sizes available Absorbed Glass Mat (AGM) lead acid type - recyclable

• Typical: CR6200 – 7.5, 12 or 15 Ah
  CR6300 – 24 or 30 Ah

• (4) Monocrystalline solar panels
  CR6200 – 2.5 Watts each, CR6300 – 5.5 Watts each

• CR6100 externally powered comes standard with 10' w(3 meters) of cable. Input voltage 8-24 VDC

• Membrane Vent for pressure equalization

• Colors Available: Red, Green, White, Amber - meet recommendations of International Association of Lighthouse Authorities (IALA) R0201(E200-1)

CR6200 LED Self-Contained Marine Beacon

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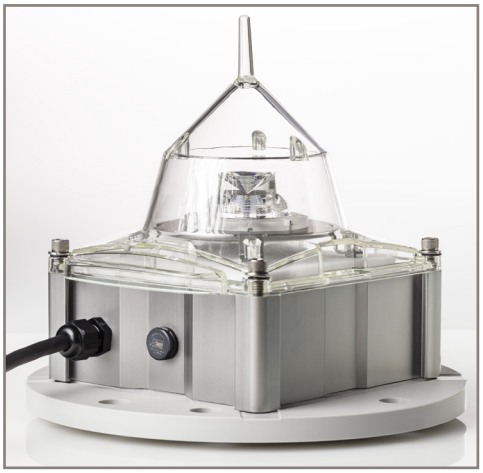
SERIES CR6000 MARINE BEACONS

CR6100 LED Externally Powered Marine Beacon



Series CR6000 Integrated carry handles

AIS Capabilities: AIS transponder integrated into the CR6300 lantern with GPS and VHF antennas. Supports: Types 1 or 3 operation, both messages 21 and 6.

• Vertical Divergence: 7.5° to 50% of peak intensity (FWHM). Symmetrical with horizontal plane

• Peak Light Intensity in Candelas depending on power system sizing for location and flash rhythm duty cycle:

	White(HF)[1]	White	Green	Red	Amber
Peak	340	205	170	165	148
Effective[2]	226	139	116	112	101

[1] *Hi flux white available in CR6100. Class A approved*
[2] *Equivalent effective intensity 0.4 second flash*

• Shipping Weights: CR6100 5 lbs (2.3 Kg), CR6200 15 lbs (6.8 kgs), CR6300 25lbs (11.3 kgs)

• Test conditions:
  • Temperature range: -4°F to 140°F (-20°C to 60°C)
  • Electrostatic Discharge (ESD): Electrostatic Discharge - IEC 61000-4-2, 8kV contact, 15kV in air
  • Windspeed: In excess of 140 knots
  • Shock: MIL-STD-202G Method 213B modified 30G's vertical, 35G's horizontal
  • Vibration: MIL-STD-202G Method 204D condition B 5G's
  • Immersion: MIL-STD-202 "IP68"

Electromagnetic Field Immunity
EN61000-4-3:2006.AMS2:2010 Part 4-3

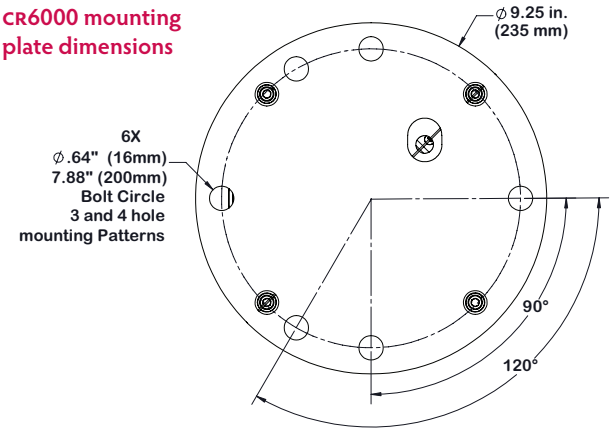
Materials:

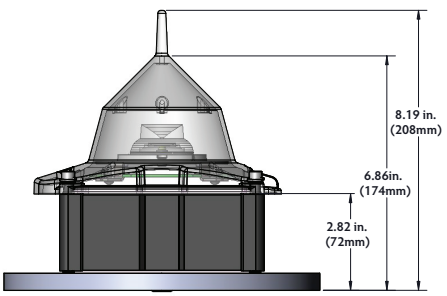
Lantern Dome & Lens: Acrylic lens and cover with bird deterrent cone shape and bird spike. Acrylic is the most scratch resistant of the thermoplastics, allows the most light transmittance, and maintains its clarity after years of UV exposure. **Lantern Housing:** Hard coat anodized aluminum. **Lantern Mounting Plate:** Marine grade high density polyethylene (HDPE). **Hardware:** Stainless steel. **Membrane Vent:** Equalizes pressure in the lantern in response to environmental changes which reduces stress on the enclosure seals and prevents ingress of water, dirt and other contaminants. It reduces condensation build up by equalizing pressure inside the light. Solar Panels are clear polymer coated

Options:

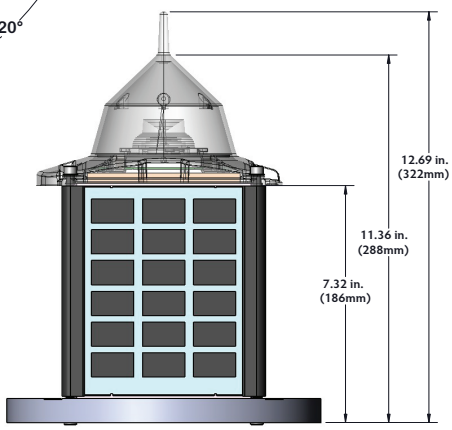
• Infrared (IR) remote control device, • GPS synchronization,
• Battery charger socket, • AIS Capabilities
U.S. patent number: 7,703,950

CR6000 mounting plate dimensions

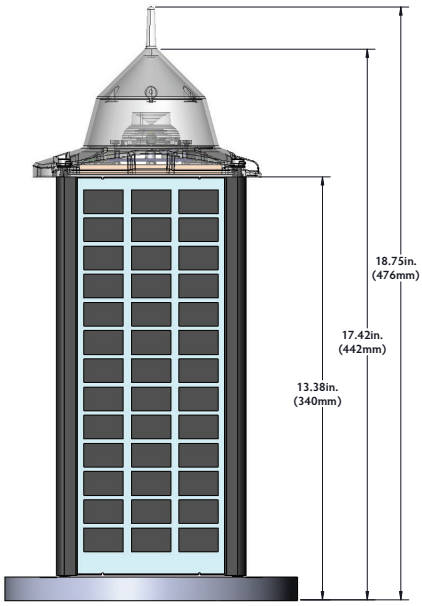




CR6100 dimensions



CR6200 dimensions



CR6300 dimensions

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