



BEACON BMU

Infrared Beacon for Sway & Skew measurement

Associated to SIRRAH® sensors, they are used for sway and skew regulation on container cranes.



PRESENTATION

BMU Beacons are coded infrared light transmitters working with the SIRRAH® sensors, they materialize the points to be located or to be tracked.

BMU beacons are designed to work outside. They are waterproof (IP66) and set up in an aluminium cast box.

Waterproofness and impact and vibration resistance are improved by using resin coated electronic boards and silent blocks.

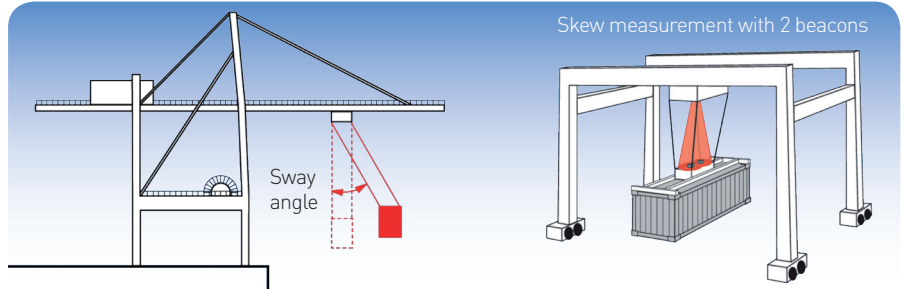
It is made of LEDs with a 880 nm wavelength, connected in a matrix way.

Emission angles depend on the beacon version : the beam can be $\pm 12^\circ$, $\pm 25^\circ$, or double beam $\pm 6^\circ$ and $\pm 12^\circ$.

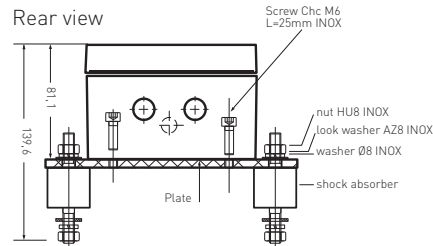
They are produced to work alone or in synchronization with others for using with a "multi beacon" sensor.

In this case, one of the beacons has the "master" function for the others which are "slaves" and received the synchronization signal.

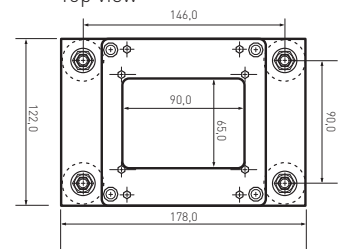
Software for commissioning is available: working mode, beacon codes and infrared power are adjustable.



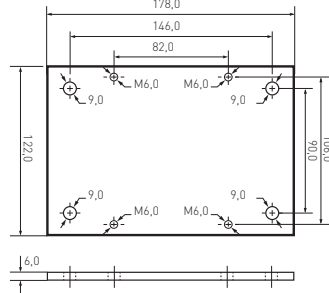
Rear view



Top view



Bottom view



All dimensions are in millimeters

ORDERING INFORMATION

BMU-01A (110/220VAC)
 BMU-02A (110/220VAC)
 BMU-05A (110/220VAC)

Cone of $\pm 12^\circ$ for sway and skew
 Cone of $\pm 25^\circ$ for sway
 Cones of $\pm 6^\circ$ and $\pm 12^\circ$ for sway and skew on stacking crane

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SPECIFICATIONS

Transmitter type	Infrared LEDs
Wavelength	880 nm
LEDs Alimentation	By pulses
Beacon emission angle	+/- 12°, +/- 25° or double cone +/-6° and +/- 12°
Level of infrared energy	Adjustable by software
Type	1-beacon (Mode 1) or 2-beacon (Mode 6) or 3-beacon (Mode 7), defined by software
Cycle time	5 msec (Mode 1), 15msec (Mode 6), 20msec (Mode 7)
Power supply	220VAC or 120 VAC
Fuse	Internal automatic fuse (resettable fuse)
Display	One Green LED for Power ON
Working temperature range	-20°C to +50°C
Storage temperature range	-40°C to +70°C
Shocks protection	Delivered with a plate and 4 shock absorbers
Protection rating	IP 66
Weight	1 kg

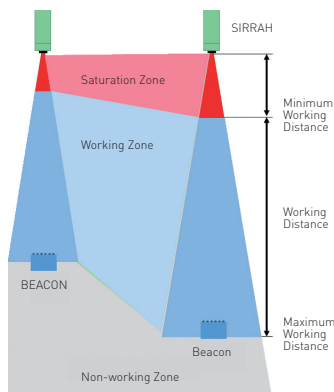
Working distance associated to beacon's power

The working distance is related to the type of SIRRAH® sensor placed in front of the beacon and to the power adjustment.

This distance is given as a ratio between the minimum and the maximum recommended working distance.

The minimum working distance is the distance below which the SIRRAH® sensor is not able to measure due to the Beacon IR light saturation.

The maximum working distance is the distance beyond which the SIRRAH® sensor is not able to guaranty the detection of Beacon IR light with a good accuracy. This maximum working distance is given for a high level of energy to allow a good working even with dust on the top of beacon.



SIRRAH® sensor	Ratio High Quality measurements	Ratio Medium Quality measurements	Minimum working distance in meter	Maximum working distance in meter High Quality	Maximum working distance in meter Medium Quality
SI19 / SI20 with BMU-01A or BMU-02A	12	14	3	36	42
			4	48	56
SI10 with BMU-01A or BMU-02A	12	14	2	24	28
			2.5	30	35
SI08 with BMU-01A or BMU-02A	12	14	1.5	18	21
			2	24	28
SI10 with BMU-05A	7.5	8.5	3	36	42
			4	30	34

Non contractual document. All specifications subject to change without notice.

