



- **Solar powered autonomous CASAMBI repeater module.**
- **Increase Bluetooth range outdoors.**
- **Weatherproof device that is easy to install.**
- **Simply operates with Casambi.**

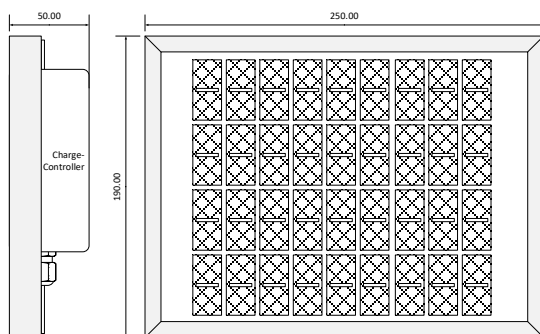
The solar repeater system LIGA.AIR.REP.SOL can be mounted outside directly on facades or masts and feeds itself autonomously and free of charge with solar energy and allows a problem-free extension of the range of the Bluetooth signal.

The basic system includes a solar panel with integrated charge controller and mounting device and a weatherproof repeater antenna with 1m cable that can be positioned as desired. This antenna can be screwed directly onto a surface (facade etc.) or clamped to a pole with a bracket. The basic system can be extended by an additional repeater antenna.

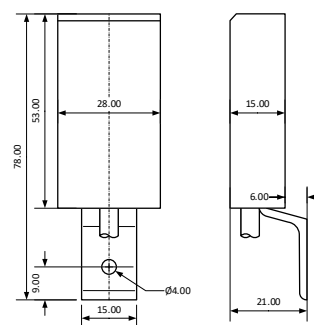
The waterproof M8 connector system allows separate mounting of solar panel and antenna. Thus, the most favorable conditions can be created for both components, such as location of optimal solar radiation for the solar panel and direction of the Bluetooth signal for the antenna. The antenna can optionally be placed further away from the solar panel with M8 extensions (max. 5m).

The battery built into the charge controller serves as energy storage and ensures the power supply of the repeater even at night or in cloudy weather.

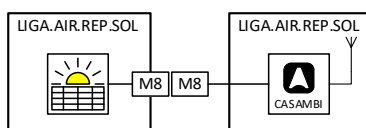
**Dimensional drawing:
Solar panel with charge controller**



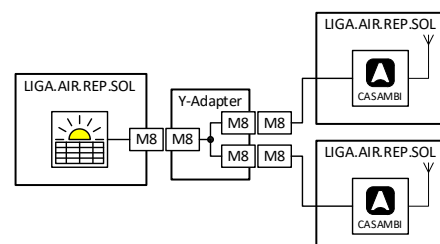
Repeater-Antenna



**Schematics:
Basic system**

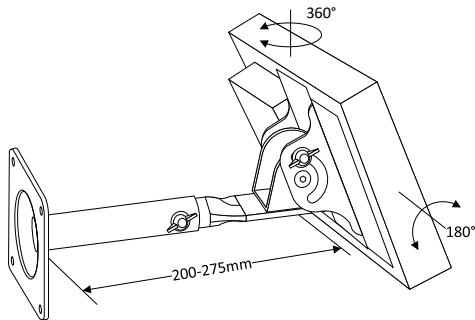


Basic system with extension:

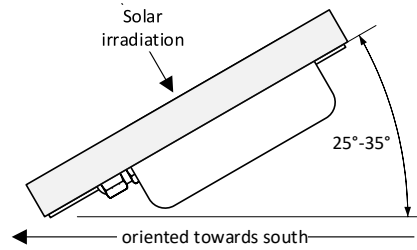




Mounting device setup:



Optimal orientation of the solar panel:



Orientation towards south at 25°-35° inclination.
 In snowy areas, choose inclination > 50° to avoid snowing of the solar panel.

Technical specifications:

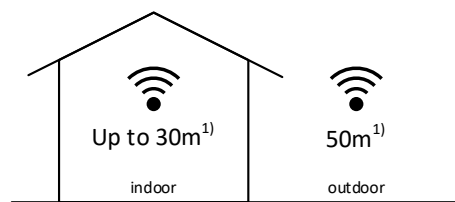
Dimension (T x B x H)	Solar panel: 250 x 190 x 50mm, Antenna: 78 x 28 x 21mm, 1m cable with M8 connector
Weight	Solar panel: 950g (without mounting device), 1550g (with MD), Antenna: 70g,
Color	Solar panel: Aluminum nature framed, mounting device: Black, Antenna: White
Mounting	With mounting device on facades, poles, etc.
Environmental conditions	Operation: Temperature -20 ... 50°C, humidity < 85%rH Stock: Temperature -25 ... 65°C, humidity < 95%rH
Protection type / class	IP55 / Appliance Class II
Power supply, charging, operating time	By solar panel, with built-in battery as energy storage. Fully charged in about 2 hours with optimal sunlight. Operating time with full charge and one antenna approx. 10 days. In poor sunlight, the charge is guaranteed for personal use.
Power consumption	0.3W max
Standards	Low Voltage Directive (LVD) 2014/35/EU, EN 60669-2-1 Electromagnetic compatibility (EMC) 2014/30/EU
CASAMBI Modul Standards	Bluetooth 4.0 Wireless Control
Applications	Bluetooth range extender
Scope of delivery	1 solar panel, 1 mounting device, 1 repeater antenna

Compatible devices:



iPhone 4S or later
iPad 3 or later
iPod Touch 5th gen or later.
Android 4.4 KitKat or later devices
 produced after 2013 with full BT 4.0 support.

Range:



Casambi uses mesh network technology, so each CBU-ASD acts also as a repeater.

Longer ranges can be achieved by using multiple Casambi units.

Range is highly dependent on the surrounding and obstacles, such as walls and building materials.

