

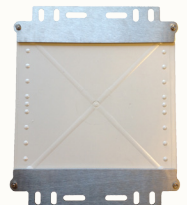
## BluFi Outdoor Sensor Solar

The BlipTrack Traffic Sensor Solution is used to measure travel times and flow in urban and inter-urban environments.

By placing BlipTrack sensors at strategic pinch points in a road network, it is possible to measure calculate travel times and flow by detecting Bluetooth and Wi-Fi-devices (WiFi sensor optional), such as mobile phones, tablets and hands-free installations. The sensors (BT & WiFi combined) are capable of collecting data from approximately 50% of all passing vehicles, bicycles and pedestrians.

With this data, traffic engineers are able to obtain specific and accurate statistical information about each road user, their dwell time and movement patterns—from the moment they enter an area until they leave, and everywhere in between.

The tamperproof and weather-resistant sensors are easily mounted on existing poles, without disrupting traffic. Sensors are deployed with either permanent or semi-permanent power, such as when connected to light poles or solar panels and are typically mounted in a height above 3 meters from the ground. Once mounted, the sensors require no maintenance.



The sensors measure 24/7 in all-weather such as snow, rain and fog. A built-in GPS receiver ensures automatic, instant and accurate location data and is configured by BLIP Systems technical team. The sensors measure in all traffic conditions, in both directions and several lanes simultaneously. At network connection loss, data caching is enabled. Directional antennas ensure a high detection rate and coverage.

The raw data from the sensors is encrypted and transferred to a secure cloud server, where it is extracted and separated. The results are presented in an online graphical user interface. Data can easily be integrated with existing Management Systems through various data output facilities and open standard protocols.

### Sensor Specifications

#### Exterior Description

- Size: 378 x 278 x 180 mm ( without mounting brackets )
- Weight: 20 kg
- Color: Light Gray ( RAL 7035 )
- Ingress Protection: IP 67 ( IEC 529 )
- Flame Resistance: UL 94-V2
- Material: Polycarbonate
- Temperature range of material: -40°C - +80°C

#### Solar Panel Charger

- Panel nominal voltage 17 - 21V
- Panel Open-circuit voltage max. 26V
- Charging limited to max. 10A
- Three-stage PWM charging algorithm with temperature compensation
- Fully electronically protected charger
- Battery undervoltage and overvoltage protection

#### Battery

- Lead Crystal Battery with 5 - 7 years normal life time
- Safe battery type approved for flight transportation without restrictions
- Capacity 12V/55Ah
- Battery weight 16,9 kg / 27,25 lbs

#### Power consumption

- Average 2,5W (w/WiFi 5,5W)
- Operation time on fully charged battery: Up to 11 days (w/WiFi 5 days)

#### Radio Characteristics

- Bluetooth 2.1 + EDR (Class 1)
- Frequency band: 2.402 - 2.480 GHz

#### Radio Interface

- 2 x class 1 radio ( directional antennas )
- 1 x class 2 radio ( omni directional antenna )
- Placement: Opposite 180°
- Beam width: 70°/70°
- Front/back ratio: 23dB

#### Connectivity

- Mobile broadband

#### GPS Receiver

- High sensitive SiRF Star 4 GPS

#### Mounting Brackets

- Material: A4 stainless steel 3mm

#### Interface for Wi-Fi sensor

- Water resistant USB connection ( IP68 )

#### Ambient Temperatures

- Operating: Max: +50°C - Min: -10°C\*
- Storage: Max: +60°C - Min: -10°C

\*Below -10°C the sensor will still be operational, but radio signals could differ from normal Bluetooth specifications. Sensor has been tested to -20°C