

Street Light Sensor

1. Features

- Motion detecting and classification sensor based on radar
- The sensor is plug and play compatible with the esave sIControllers
- Detecting range up to 20m for motion detecting
- Detecting area for motion detecting 34° x 80°
- Measures the speed and direction of the detected objects
- Easy to use software for on-site configuration and controlling
- Optional integration into a web based management and control application with on-site gateway devices
- Classified objects between the following groups:
 - Pedestrians
 - Cyclists
 - Motorbikes
 - Cars
 - Trucks
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Example of the meter readings:

	Bus/Truck		Car		Motorbike		Bicycle		Person		? unknown		Total	
	Approaching	Receding												
08.02.2018 23:45	108	206	3139	3044	10	4	0	1	17	41	4	3	3278	3299

2. Ordering Information

Product codes:

esave LightRadar – Vxx.yy

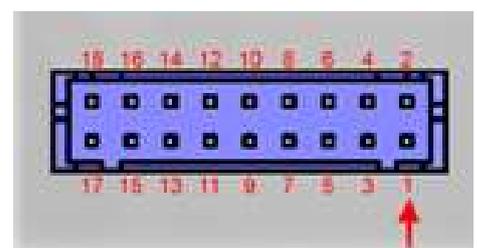
xx: Major HW version

yy: Minor HW version

3. Sensor connector pin out

Table 1: Sensor connector pin out

Interface Pin #	Name	Description
1	POWER	Power supply (+12V)
5	GND	Ground
9	SCL	I2C bus clock
8	SDA	I2C bus data
3	MOTION	Motion detecting signal

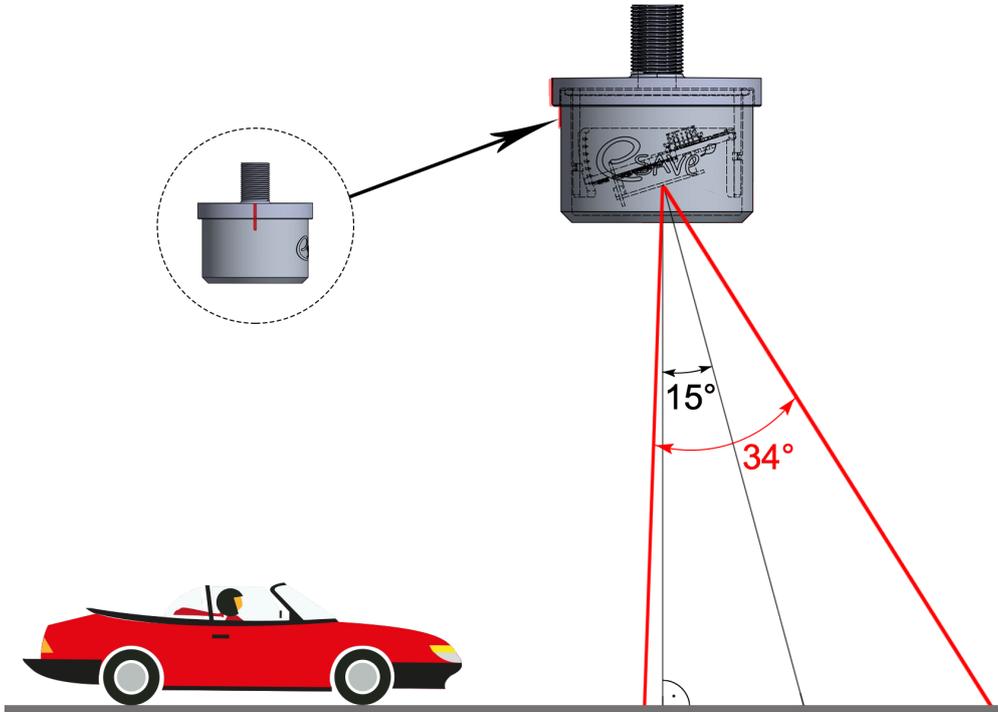


4. Installation

- If the sensor is used as a classification sensor, it will be necessary to install the sensor according to this definition

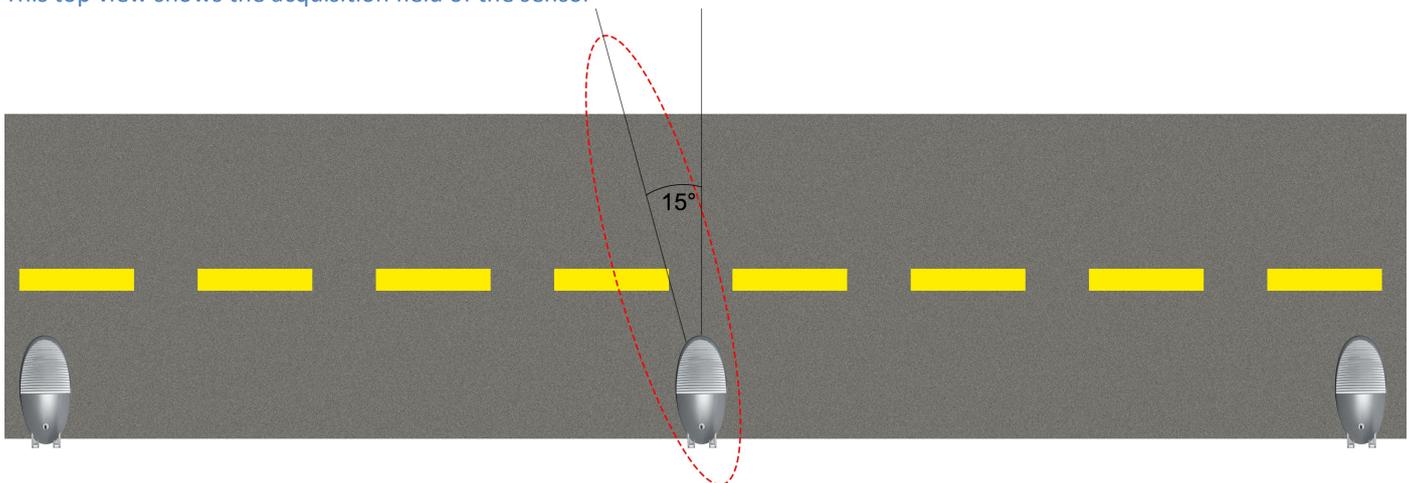
Side view

The sensor must be adjusted parallel to the ground and the notch must be aligned in street direction.



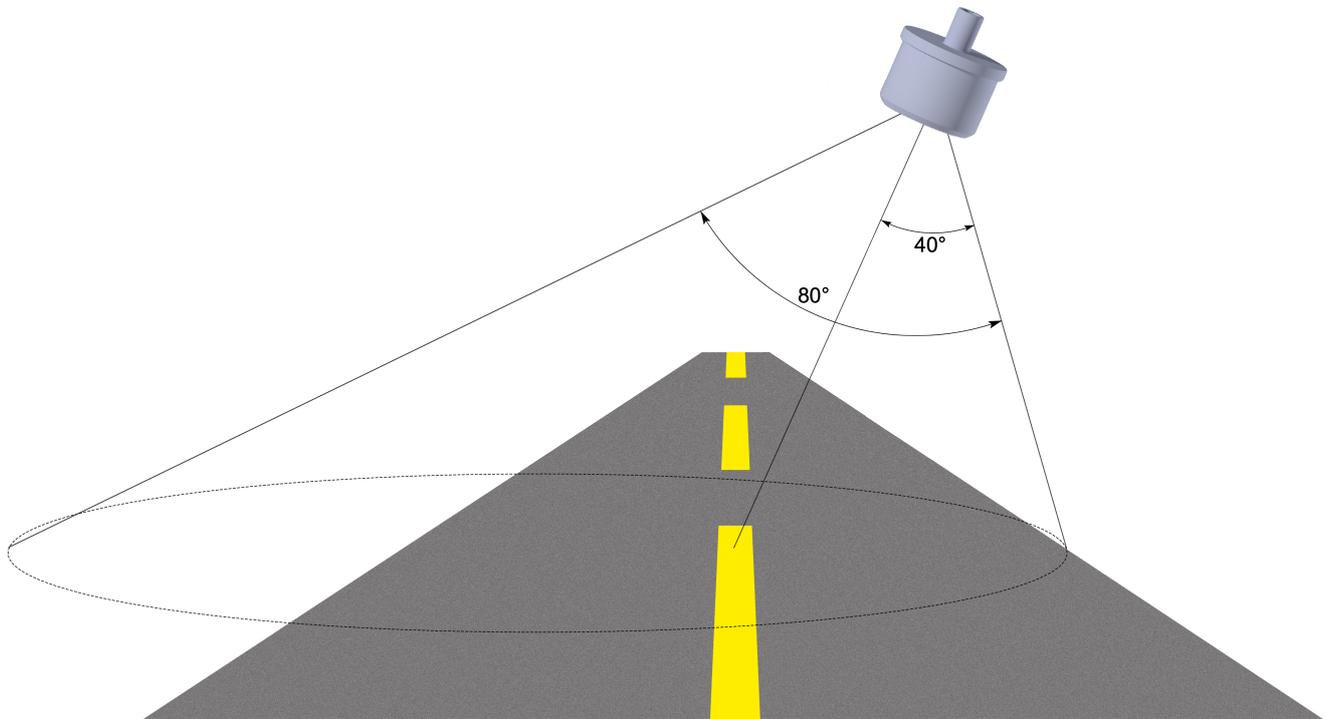
Top view

This top view shows the acquisition field of the sensor

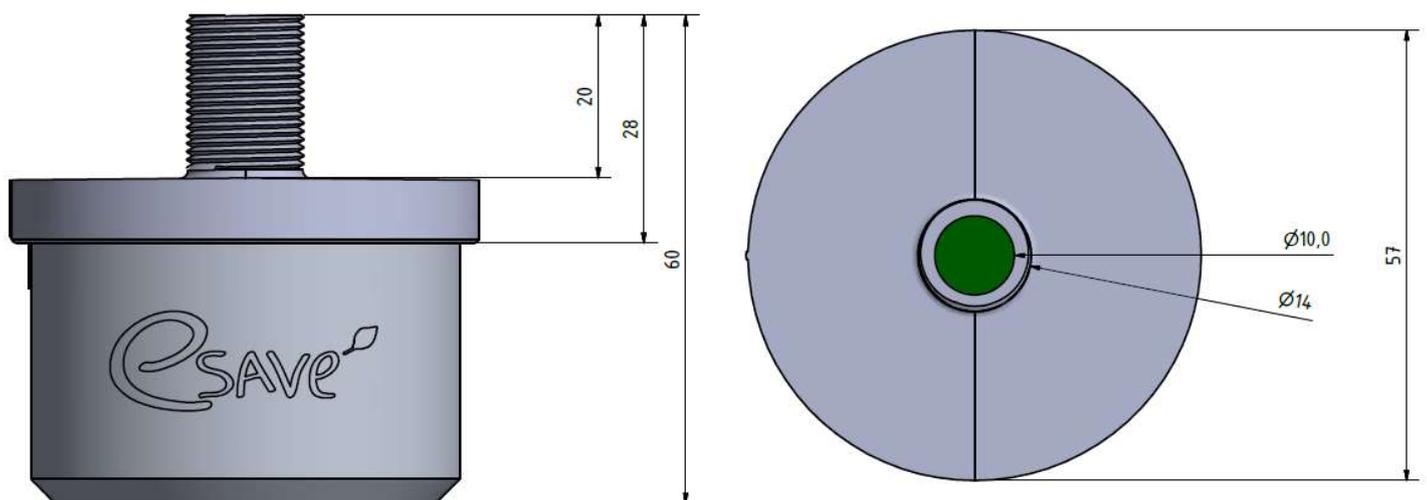


3D view

The sensor axis must be alignment to the middle of the street



5. Physical Dimensions



All dimensions are in millimeters

6. Electrical and Thermal Characteristics

Table 2: Maximum ratings

Parameter	Symbol	Min	Max	Unit
Supply voltage	V_{IN}	-30	15	V DC
Operating temperature		-25	+80	°C
Storage temperature		-25	+90	°C
I2C bus voltage	V_{I2C}	-0.2	3.5	V DC
Motion detecting signal	V_{mot}	-0.2	3.5	V DC

Table 3: Operation characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Supply voltage range	V_{IN}	10	12	15	V DC
Power usage @12V	I_{IN}		40	70	mA

7. Revision history

Table 7: Revision history

Revision	Date	Comments	Initials
01	02.02.2018	revised	HB
02	25.07.2019	specification updated	HB

8. Contact

esave ag
Kupfergasse 15
CH-7000 Chur
Switzerland

T +41 (0)81 511 55 50
F +41 (0)81 511 55 51
info@esaveag.com
www.esaveag.com