

SWARCO

CAIMAN-2 PLUS

HIGH-PERFORMANCE WIDE BEAM STOP+MOTION RADAR DETECTOR

OPTIMIZED
FOR CHALLENGING
APPLICATIONS AND
HIGH RANGES

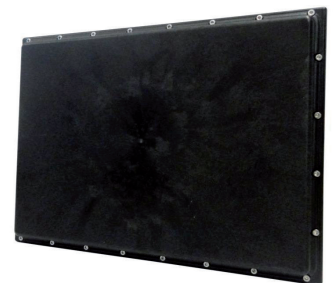
The CAIMAN-2 Plus high-performance Stop+Motion radar detector offers, compared to the standard product family Caiman-Pro, a significantly larger detection area and higher performance for special applications. With its wide beam angle, it is particularly suitable for lane-selective detection with extended requirements on multiple lanes and roads simultaneously.

CAIMAN-2 PLUS

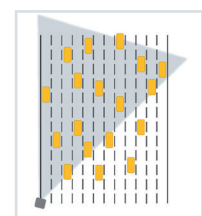
Both moving and stationary objects are detected and tracked in the entire detection range. The following data is provided: Amount, occupancy, speed, presence, distance, gap and wrong-way driver trigger. The objects are differentiated into up to 7 classes (pedestrians, bicycles, motorcycles, passenger cars, vans, trucks / buses, articulated trucks). In addition, the CAIMAN-2 Plus offers various freely configurable event triggers, optionally depending on speed and object class, for presence detection, estimated time of arrival, congestion length and wrong-way driver detection. Thanks to its flexible mounting positions, it offers a wide range of applications and installation options. It detects objects of the classes passenger cars and trucks in a detection range of 20 m up to 260 m.

TYPICAL APPLICATIONS

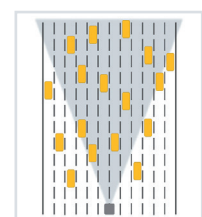
- Application in intersection area with extended requirements for stop line detection, advanced detection, vehicle counting
- Calculation of estimated time of arrival (ETA) / dilemma zone detection
- Traffic management and traffic data acquisition with detection of vehicle speed, counting, occupancy and congestion length
- Special applications such as wrong-way driver detection, congestion detection



DETECTION POINTS (EXAMPLES)



sideways mounting



centered mounting

CAIMAN-2 PLUS

FEATURES

- High-performance object detection with a wide beam angle of 110° over several lanes and roads
- Stop+Motion function (simultaneously up to 256 moving and stationary objects)
- High precision measurement of vehicle speed, distance to the sensor, horizontal and vertical angle
- Data output: number, occupancy, speed, presence, distance, gap, wrong-way driver trigger and congestion length
- Multiple options for detector positioning and installation (e.g. mast arm, vertical post)

BENEFITS

- Large detection angle and range
- Simultaneous detection of all lanes and, if necessary, several roads in the detection area
- Detection in the entire detection area from the stop line to the detection limits (20 m up to 260 m from the mounting point) or only in selected areas
- 100 % independent of time of day and light (bright sunlight, shadow, twilight, night)

TYPICAL PARAMETERS

CAIMAN-2 PLUS Multi 110° (Order no. D.000.604.731)

Application	Traffic light installations
Nuber lanes	up to 12 lanes
Distance to stop bar	recommended 25 m (20 m to 90 m)
Typical range	recommended up to 150 m (max. 260 m for cars and trucks)
Sensor height	recommended 6 m (1 m - 10 m)
Vertical angle down to road	-2° (-6° to 0°)
Horizontal angle	-10° (-25° to +25°)

CAIMAN-2 PLUS Interurban 110° (Order no. D.000.604.732)

Application	Traffic data acquisition
Distance to detection line in approaching traffic	recommended 30 m (20 m to 90 m)
Distance to detection line in departing traffic	recommended 120 m (70 m to 130 m)
Side distance to first lane	recommended 1 m (0 m to 10 m)
Vertical angle down to road	-2° (-6° to 0°)
Horizontal angle	-10° (-25° to +25°)

TECHNICAL SPECIFICATIONS

Application	Special applications with challenging requirements, Long distance and wide coverage angle
Covered area (distance from pole)	Typical 20 m up to 150 m, max. 20 m up to 260 m
Max. azimuth field of view	110°
Ambient Temperature	-40°C to +80°C
Weight	1290 g
Dimensions	213 mm x 155 mm x 32 mm plus connector (B x H x T)
Power Supply	7 V DC to 32 V DC, 9.5 W
Frequency band	24.0 GHz bis 24.25 GHz
Interfaces	RS485 full-duplex, Ethernet 10/100, CAN-Bus CAN V2.0B (passiv)
Connector	12-pole plug series Hirose LF10 (power supply, CAN, RS485, Ethernet)

