

CAIMAN-PRO M

WIDE BEAM STOP+MOTION RADAR DETECTOR

SWARCO TRAFFIC SYSTEMS GmbH is a member of the internationally active SWARCO group, the one-stop shop for road markings, signage, signalisation and traffic management – your reliable partner for traffic solutions.

The Caiman-Pro M wide beam Stop+Motion radar detector is suited for lane discrimination over multiple lanes. It detects and tracks moving and stopped objects within the entire detection area delivering the following data: volume, occupancy, speed, vehicle presence, headway, gap and wrong way detection trigger. Due to its forward firing position it offers a wide range of applications, detection points and mounting positions. The Caiman-Pro M is available with two antennas suited for detection areas of 20 m up to 50 m resp. 180 m.

FEATURES

- Wide beam over multiple lanes
- Stop+Motion function (simultaneously up to 126 moving and stopped objects)
- Accurate measurement of vehicle speed, distance to the sensor, horizontal and vertical angle
- Data provided: Volume, occupancy, speed, vehicle presence, headway, gap, wrong way detection trigger
- Multiple choice of detection points and mounting positions (e.g. mast arm, vertical pole)

TYPICAL APPLICATIONS

- Intersection application with stop bar 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 and occupancy
- Special applications such as wrong way driver detection, traffic jam detection

BENEFITS

- Only one radar necessary for the detection at one intersection arm
- Simultaneous detection across all lanes within the detection area
- Detection within the entire detection area from the stop line to the detection threshold (20 m up to 50 m resp. 180 m from mounting point) or only in selected parts
- 100 % independent of time of the day and light conditions (bright sunlight, shadow, dawn, night)

RECOMMENDED MOUNTING PARAMETERS

	Caiman-Pro M ₃₂	Caiman-Pro M ₈₀
Number of lanes	4 (at stop line ≥ 30 m)	6 (at stop line ≥ 25 m)
Typical range	up to 150 m	up to 50 m
Sensor height	6 m	6 m
Vertical angle down to road	-6°	-6°
Horizontal angle	-8°	-12°

CAIMAN-PRO M

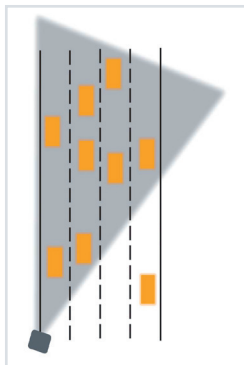
TECHNICAL FEATURES:

	Caiman-Pro M ₃₂	Caiman-Pro M ₈₀
Application	large distance to stop bar large intersection / rather straight road	short distance to stop bar where Caiman M ₃₂ cannot be applied
Covered area (distance from pole)	typical 20 m up to 150 m, max. 20 m up to 180 m	typical 20 m up to 50 m, max. 20 m up to 80 m
Max. azimuth field of view	32° (+/-16°)	80° (+/-40°)
Ambient Temperature	-40°C to +85°C	-40°C to +85°C
Weight	340 g	340 g
Dimensions	110 mm x 99 mm (w x h)	110 mm x 99 mm (w x h)
Power Supply*	8 V DC to 32 V DC, 5 W	8 V DC to 32 V DC, 5 W
Frequency Band	24.0 GHz to 24.25 GHz	24.0 GHz to 24.25 GHz
Interfaces	RS485 full-duplex, Ethernet 10/100	RS485 full-duplex, Ethernet 10/100
Connector	12-pin plug series Hirose LF10WBRB-12PD (power supply, CAN, RS485, Ethernet)	12-pin plug series Hirose LF10WBRB-12PD (power supply, CAN, RS485, Ethernet)

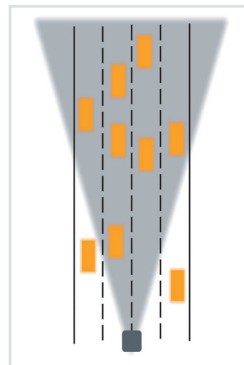
STOP+MOTION FUNCTION

Due to its novel Stop+Motion function the Caiman M not only detects and tracks moving objects but also determines stopped objects. The sophisticated algorithm "remembers" static objects until they start moving again thus providing an additional presence detection.

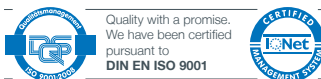
DETECTION POINTS (EXAMPLES)



sideways mounting



centered mounting



SWARCO TRAFFIC SYSTEMS GMBH

SWARCO TRAFFIC SYSTEMS GMBH is one of the leading suppliers of intelligent traffic systems in Germany. Building on many decades of experience, it offers a wide range of innovative solutions for urban and interurban traffic management, including parking and traffic detection. Its nationwide service and maintenance network guarantees highest possible system availability and improved road safety. With economical, sustainable, and environmentally friendly technologies we help ensure smooth and safe traffic flows.

SWARCO TRAFFIC SYSTEMS GMBH Sales Detection

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