

# CAYMAN-K2CO24 Driving Assistance and Security System

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Driving assistance system CAYMAN K2CO24 has been developed for active support of the vehicle (including armored vehicles, combat tanks, SP artillery mounts etc) in critical driving situations. The main purpose of the system is continuous monitoring of the vehicle surroundings to detect potentially dangerous situations at an early stage and help drivers of tactical wheeled vehicles avoid accidents. Moreover, the system supports safe driving in total darkness when headlights are off.

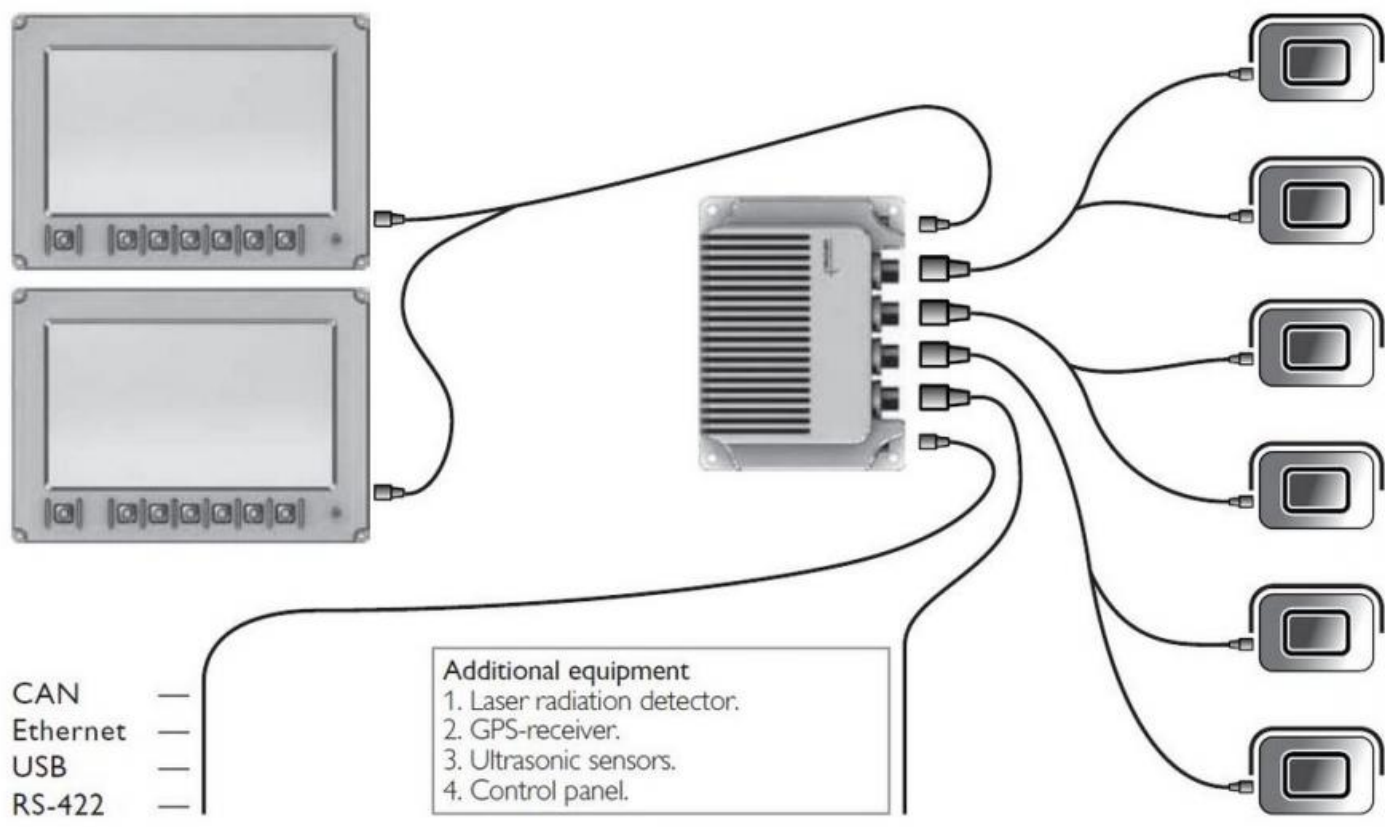
The system is built with components that are more rugged to navigate unstructured environments.

CAYMAN K2CO24 consists of 4 hybrid cameras mounted on the body of the vehicle (in front, at the rear and on each side), providing a complete overview of the surroundings and keeping the vehicle from straying from its pathway or hitting the obstacles in its blind spot. Each camera has a daily channel with a high-quality CMOS detector and a thermal imaging channel equipped with a high-sensitivity passive long-range infrared receiver (LWIR) that makes possible to the driver to monitor the situation in all weather conditions.

The image from the cameras is reflected on the highdefinition color display, which is installed in the cab of the vehicle. The system is powered by an onboard network of a vehicle with a voltage of 12-24V.



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TECHNICAL CHARACTERISTICS

<b>DETECTOR</b>							
Technology	Uncooled VOx Microbolometer						
Resolution	336 x 256			640 x 512			
Pixel size	17 μ						
Operating wavelength	7.5-13.5 μm						
Sensitivity	<30 mK						
<b>OPTICS</b>							
Objective	7.5 mm		14.25 mm		35 mm		
Objective F number	F/1.4		F/1.2		F/1.2		
Field of view (horizontal)	90.2°	45.1°	44°	22°	17.6°	8.8°	
Field of view (vertical)	68.4°	34.2°	33.4°	16.7°	13.4°	6.6°	
Focusing range	8 m ÷ ∞		10 m ÷ ∞		10 m ÷ ∞		
Detection	300 m ± 15%		600 m ± 15%		1150 m ± 15%		
Recognition	75 m ± 15%		150 m ± 15%		250 m ± 15%		
Identification	40 m ± 15%		75 m ± 15%		180 m ± 15%		
<b>ELECTRONICS</b>							
Frame rate	25 Hz (PAL) / 30 Hz (NTSC)						
Video output	PAL, NTSC						
Display	TFT/LED, 800x600						
<b>TELEVISION MODULE</b>							
Objective	2.8 mm (Wide FoV 109°x82°) ÷ 12 mm (Narrow FoV 22°x18°)						
Minimum illumination	0.01 LUX (COLOR); 0.001 LUX (B&W)						
Standard of outcoming	(720 x 576) PAL, NTSC						

signal CVBS

### OPERATING PARAMETERS

Starting time	3 sec
Temperature range	-30°C ÷ +65°C
Display dimensions (10") (L x W x H)	280 x 200 x 40 mm
Camera dimensions (L x W x H)	196 x 95 x 170 mm
Display weight	1.65 kg
Camera weight	3 kg
Protection level	IP67



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