



CHEETAH DVE Cameras System was designed to assist BTR driving when visibility is limited, in full darkness and all weather conditions, during day and night.

The system includes three dual cameras at the front, with 120 degrees Field of View, one rear camera at the back of the vehicle, and 3 video monitors inside the driver's cabin.

The front cameras have thermal imaging channel as well as CMOS visual channel. The rear camera has only visual channel, and it is equipped with LED backlight for night driving. When the driver is engaging the back gear, the video of the rear camera is forced on the central monitor along with driving guides color overlay.

In front of the driver there are 3 monitors of size 7 inch. The central monitor is for displaying the front and rear cameras (at the same time or separately), the right monitor is for watching the right-side camera, and the monitor on the left is using to display the left side camera.

On the monitors there are push buttons to turn the system on and off, to change the brightness of the displays, and to control zoom and polarity of the thermal cameras.

Front Cameras Technical Specifications

Feature	Description
Thermal Channel	
Detector type	Uncooled Microbolometer Array
Spectral band	8-14u
Detector resolution	640 X 480 pixels
Pitch	17um
Detector NETD	< 50mK
Lens	fixed, athermalized, 7.5mm focal length F#1.2
Field of View (Overall)	120 degrees
Frame rate	25/30fps
DRI (person)	Detection: > 300m, Recognition: > 100m
Window	IR Window with DLC Coating
Focus range	from 2m to Infinity
Output Interface	Video output format: Analog PAL
Day Channel	
Type	Color CMOS 1/2.8 inch
Effective pixels	1300 X 980 pixels
Field of View (Overall)	120 degrees
Window	With Anti-Reflective coating
Min Illumination	0.2 Lux
Output Interface	Video output format: Analog HD
Camera Box	
Dimensions	160mm X 120mm X 108mm
Operating Temperature	-30 to +55 degrees (with heater)
Weight	2.5 Kg
Input voltage	18 to 36 VDC
Power consumption	< 4.5W
Environmental Protection	IP67

Rear Cameras Technical Specifications

Feature	Description
Day Channel	
Type	Color CMOS 1/2.8 inch
Effective pixels	1300 X 980 pixels
Field of View (Overall)	120 degrees
Window	With Anti-Reflective coating
Min Illumination	0.2 Lux
Output Interface	Video output format: Analog HD
Backlight	2 rows of LED lamps
Camera Box	
Dimensions	90mm X 90mm X 108mm
Operating Temperature	-30 to +55 degrees (with heater)
Weight	2 Kg
Input voltage	18 to 36 VDC
Power consumption	< 3W
Environmental Protection	IP67

Monitors Technical Specifications

Feature	Description
LCD Panel	
Screen size	7-inch (diagonal)
Monitor native resolution	1024 (Horizontal) X 600 (Vertical)
Number of colors	16.7M
Contrast Ratio	800:1
Brightness	800 cd/m2
Viewing Angle	170 / 170
Features	OSD overlay, multi-input, fast video switching, up to 4 & 8 channels
Screen control	Brightness: increase and decrease
Screen protection	Tempered glass with Optical bonding
Video input format	PAL, NTSC, AHD (higher resolution)
Display Box	
Operating Temperature	-30° to +55 °C
Environmental Protection	IP67
Weight	< 1Kg
Input voltage	12VDC nominal, 9-36V range
Power consumption	< 12W
Overall Dimensions	196 mm (W) x 124 mm (H) x 40mm (D)

Total power consumption	Less than 60 Watts
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