

# KOLO VC1 driving vehicle thermal camera



## KOLO VC1 Series

KOLO VC1 driving enhancement thermal sensors are designed to work and perform 24/7 in harsh environments, where extreme temperatures, vibrations, and others affect regular thermal systems. VC1 systems are designed to be installed in vehicles, mining mega trucks, and other industrial machines.



Protected by a thick heavy-duty aluminum body and ready to be immersed in water, VC1 is designed to resist dust, dirt, water, and any rough condition. It includes a quick mount bracket to install it wherever you need and with quick connection IP67 cables and wide working voltage.

Designed with single or dual video output to connect 2 monitors, and even HDMI high definition video connection to ensure you get the best video details.

## Wide range of lenses fitting your requirements

Select from 8 to 35mm. lenses making VC1 thermal sensors suitable for driving enhancement or for mid-range detection.

## Key features:

- Thermal resolution in 640x480 and 384x288 pixels
- High-performance NETD thermal a-Si sensors with 12 $\mu$ m. pixel pitch
- Athermal focus-free lenses with auto defroster
- Heavy-duty aluminum casting body
- IP67 waterproof
- Vibration proof
- Wide working voltage range
- Military-grade 8" and 10" optional
- DVR ready, with GPS location, video transmission
- Google Maps location, with DVR

Specifications:

MODEL	VC1 Series	
THERMAL SENSOR	Type	Vehicle driving enhancement thermal system
	Sensor	LWIR, uncooled a-Si micro-bolometer
	Wavelength	8-14 $\mu$ m.
	NETD	<40mK@f/1,0 50Hz, 300K
	Pixel pitch	12 $\mu$ m
	Resolution	384x288 / 640x480
	Color palette	10 colors
	Image enhancement	Yes
	Frames/second	50/60 fps
	Lenses	7,5/8,1/19/25/35 mm. athermal lens free focus
	NUC	Automatic
	Analog video output	2X CVBS connection
	Digital video output	1X HDMI connector
	Time to image	2 seconds
	Working temperature	-25/70 C
	Working voltage	8-36v DC/2,5 W.
	Waterproof	IP67
	Shockproof	As per standard ES95400
Weight	243 gr., without lens	
Size	4 Channel	
DVR	System	Embedded Linux
	Video input	4 Channel
	Video output	2X CVBS, 1X HDMI
	Recording resolution	1920 x 1080
	Frames/second	120fps in 1920 x 1080
	Video search	Time/ Event/ Calendar/ Quick Play
	USB connections	2X USB
	Mini PCIe card	1
	Storage	2X Micro SD up to 512 Gb (Also available with 1X SSD/2.5 HDD)
	I/O connections	4X sensor, 1X alarm, 1x RS485, 2x USB, 3 Axis G sensor 1 CH Video / Audio In, DV12V Out, 3 CH Video In DC12V Out, 1 DC power in
	Protocols	Pelco D/P
	Power	6-36v. DC with programmable power on/off delay
	Working temperature	-25 C~70 C
	Network	1X RJ45 10/100 Mbps. Ethernet
	Humidity	95 % not condensing
	Size	104x73x23 mm.
	Options	3G/4G data, GPS antenna, Wi-Fi module, G-shock sensor
	Weight	180 gr.
Warranty	1 year	

10" Monitor	Type	Military-grade 10 monitor with aluminum frame and heavy duty bracket
	Resolution	1024x768
	Pixel pitch	0.0685 (H) x 0.2055 (V) mm.
	Contrast ratio	1200
	Brightness	350 cd/m <sup>2</sup>
	Viewable angle	-88~88 (H) -88~88 (V)
	Active display area	210.4 (H) x 157.8 (V) mm
	Colors	16.2 M
	Back panel I/O	1xVGA or 1xHDMI, MIL Military-grade lockable (MS27467T9F98S) power
	Control button	Menu/ Enter, Auto-adjust/ Esc, Brightness Up/ Increase, Brightness Down/ Decrease Button, Display Power Button
	Led indicator	On/Off, display sleep
	Size	315 mm x 250 mm x 67 mm
	Power input	12V DC/MIL-grade connector
	Power demand	22W
	Working temperature	-10/55 C
	Mounting	VESA mount, Vehicle mount
	Shock	30g for 18 ms, 300 m/s
	Vibration	1.60/1/96/2.18 g rms for XYZ /5-500 Hz
	Warranty	1 year
	Humidity	10=95% not condensing
Waterproof	IP65	
Bracket	Heavy duty metal black with quick lock	

As improvements to the thermal imager, it is possible to add the ability to record images and AI recognition objects.