



VNIR Driver Vision Enhancement System

MT-DVE-VNIR-001

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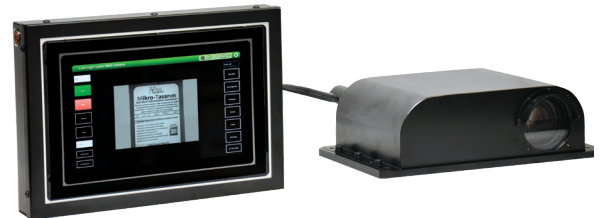
VNIR Driver Vision Enhancement System

Features

- Increase vehicle safety and security
- Increase local situational awareness of driver
- Night vision enhancement
- Assisting driver to identify potential threats and obstacles
- Display in real time video
- Switching between front and rear cameras
- Virtual image of wheel tracks for assisting driving
- Video recording
- User friendly user interface, touch screen monitor

A. Front Camera

- Sensor: VNIR Sensor Module (640x480)
- Lens: 25mm f/0.85-f/360 DC-Auto Iris
- Processing Unit: 1 GHz 4-Core ARM CPU
- Housing: Metal Housing, IP67



B. Rear Camera

- Sensor: VNIR Sensor Module (640x480)
- Lens: 25mm f/0.85-f/360 DC-Auto Iris
25mm f/0.95 Manual Iris Lens (*Optional)
- Processing Unit: 1 GHz 4-Core ARM CPU
- Housing: Metal Housing, IP67



C. Smart Display and Processing Unit

- Display: Touch Screen, 10.1"
- Processor: 1 GHz 4-Core ARM CPU
- Display Housing: Metal case, mounted inside



D. Control Unit

- Control Boards: 4-port Gigabit Network and Power
- Housing: Metal case, mounted inside





“moonless night, no city light”

Technical Specifications

Front and Rear Camera Technical Specifications

Wave Length	Visible Near InfraRed (VNIR): 400nm-1100nm
Frame per Second (FPS)	≤ 25 fps (programmable)
Exposure Control	Global Shutter
Light Sensitivity	≤0.3 mLux (Noise Equivalent Light Sensivity)
Resolution	Programmable, VGA (640x480) or QVGA (320x240)
Processor	1 GHz ARM Cortex-A9 Quadcore Processor 1 GB DDR3 Memory
Storage Media	Operating System: 4GB eMMC
Video Recording	100GB Internal SSD Disk
Video Compression Format	H.264 (for recording and video out)
Video Output	GigaBit Ethernet (IP Camera)
Lens	25mm f/0.85-f/360 DC-Auto Iris 25mm f/0.95 Manual Iris Lens (Optional)
Enclosure	Rugged Metal Enclosure (IP67)

Smart Display, Processing and Control Unit Technical Specifications

Smart Display	Touchscreen LCD, 10.1", 1024x600, ARM Processor
User Interface Software	Touchscreen Video Imaging Software
User Interface Software Specifications	Selection between Front and Rear Camera Display of Selected Image Virtual Image of Wheel Tracks External Memory Recording
Screen Video Input	Gigabit Ethernet
Voltage	24V – 48V DC
Camera Input	2 (Front and Rear)
Enclosure	Metal Body



Mikro-Tasarım was founded in 2008 as a fabless semiconductor IC design company. It provides design, development and test services for custom mixed-signal integrated circuits and performs research and development for its upcoming products. It is specialized in the development of advanced, high-performance Readout Integrated Circuit (ROIC), sensors and cameras working in VNIR, SWIR, MWIR, and LWIR bands and Application Specific Integrated Circuit (ASIC) products for surveillance, aerospace, security, energy, scientific, industrial, and commercial imaging also provides test electronics, test software, camera cores to demonstrate the performance of its own imaging products.

Mikro-Tasarım's mission is to provide high performance, new generation, cost-effective, low power, and low noise infrared imaging products to its customers world-wide.

Mikro-Tasarım is located in Ankara/Turkey, and employs 35 people.

For further inquiries, please contact us

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