

# **Perfect Vision Workflow**



# **Driver Monitoring System (DMS)**

Driver Monitoring System DMS is an intelligent system that aims to improve safety and increase efficiency for the company s vehicle fleet. It helps to increase functionality and productivity while reducing the cost related to operations and maintenance.



# **Driver Monitoring System (DMS)**





# The Perfect Vision DMS Solutions Provide the Following Benefits:

- GPS Real-Time Combined with Insights
- Enhancing the Safety of the Driver, Vehicle and Pedestrian
- Customized Reports to Improve Efficiency and Reduce Cost
- Better Fuel Consumption
- Improving Vehicle Maintenance
- Optimized and Effective Route Planning





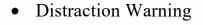
# The Perfect Vision DMS Consists Of Three Main Components:

- Driver Monitoring System (DMS)
- Advanced Driver-Assistance Systems (ADAS)
- Blind Spot Detection (BSD)

### **Driver Monitoring System (DMS)**

The Driver Monitoring System is an AI based camera to monitor various human behaviors, and ensure the driver is awake, alert and following the safety rules. This AI camera is also able to detect the signs of fatigue, and alert the driver to device carefully.

Here are some capabilities of this intelligent safety system:



- Driver Fatigue
- Yawn Warning
- Look-Aside Warning
- Calling Warning
- Smoking Warning





## **Advanced Driver Assistance System (ADAS)**

ADAS AI camera aims to achieve provide safety driving features avoid collision. Here are some benefits of ADAS system

- Lane departure warning.
- Pedestrian detection warning.
- Over speed warning
- Forward collision Warning FCW



# **Blind Spot Detection (BSD)**

Blind Spot Detection or BSD camera that helps and supports drivers to operate safely when passing lane to avoid side accidents and collisions. This smart system is e uipped with AI Based Camera. With this system, the driver will receive alert to be aware of detected objects in both:



# DMS Document for Features & Technical Specification

### **Product Features:**

- Built-in high-performance image processing chip, H.265 encoding, with high compression ratio and clear image.
- Support 8-channel real-time preview and storage
- 1 channel audio and video synchronous output, 1 channel VGA output
- Support UPS power access
- Built-in G-Sensor, real-time monitoring of vehicle driving behavior
- Reversing image ranging assistance
- Video horizontal and vertical mirroring adjustment

### **Power Supply:**

- Professional vehicle power supply 10VDC —36VDC wide voltage input design.
- Various protection circuits such as under-voltage, short circuit, reverse connection, etc., suitable for various car models
- Support intelligent power management recognition, automatic shutdown at low power, low power consumption when flame out
- Supports regular upload of GPS location information to the platform after standby.

### **Technical Standard Data Storage:**

- Built-in super capacitor to avoid data loss and disk damage due to abnormal power failure
- Using a special file management mechanism to encrypt data to effectively protect data security.
- Support 2.5-inch 2TB mechanical HDD
- Support SD storage, maximum support 256G

### **Interface Transmission:**

- Built-in GPS/BD module, high sensitivity, fast positioning
- Built-in 4G module, support LTE/HSPA/WCDMA/EVDO

### Active safety early warning system:

• Built-in ADAS and DMS AI Features.

# **MDVR Technical Specification**

Parameters	Specifications
Video format	PAL/NTSC
Compression standard	H.265
Image resolution	1080P/ 720P /960H / D1 / CIF
Playback quality	1080P/ 720P /960H / D1 / CIF
Combination Ways	Various Ways
Decoding ability	1 channel 720P real-time
Video quality level	1 to 8 can be configured
Screen display	Support 1, 2, 4 multi-screen display
Audio compression	G.726 format
Recording method	Synchronous recording of sound and video
Video clarity	6 levels of image quality optional
Storage method	Hard disk + SD card
Video query	Support search by channel, video type, alarm type Local playback
	8-channel playback, playback by time
Local playback	8-channel playback, playback by time
Local backup	Support SD card, U disk automatic backup
Audio and video	Input 8 channels
Vehicle speed pulse	Yes



# **MDVR Technical Specification**

Parameters	Specifications
Vehicle speed pulse	Yes
Disk interface	SATA
SD card	1 SDXC high-speed card (maximum support 256G) (optional)
USB interface	1 USB 2.0 (support full mouse operation, USB delay self-test)
Ignition input	1 ACC signal
Printer	Support
IC card slot	Support
Disk lock	Yes
Data reading interface	1 USB interface
GPS/BD	Supports antenna insertion/unplugging/short circuit detection
4G	Support LTE/HSPA/WCDMA/EVDO
DMS interface	Yes
ADAS interface	Yes
Audio output	Yes
Power input	DC: 10V~36V
Power output	+12VDC@2A, +5VDC @1A
Typical power consumption	Normal working state <5W (excluding peripherals)
Working temperature	-20 70 °C
Storage capacity	720P 0.8G/hour/channel 1080P 1.5G/hour/channel



# **ADAS Camera Technical Specification**

Parameter	Specifications
Sensor type	CMOS Sensor
Pixel size	3.75um*3.75um
Focal length	3.6mm
Relative aperture	F2.4
Metal lens interface type	M12xP0.5
Field of view	D=85° H=60° V=53°
Image mode	Color Picture
Wide dynamic range	70.4dB
Support resolution	1280*720P
Output signal	AHD Analog HD
Support video format	PAL
Frame rate	25fps
Supply voltage	VCC12V
Current	Around 66mA
Power consumption	0.792W
Operating temperature	'-25°-+75°
Storage temperature	'-30°+80°
Aviation line length	0.57 meter

# **DMS Camera Technical Specification**

Name	Specifications
Sensor type	CMOS Sensor
Pixel size	3.75um*3.75um
Focal length	2.8mm
Aperture	F2.0
Metal lens interface type	M12xP0.5
Field of view	D=115° H=91° V=67°
Image mode	Black and white image
Wide dynamic range	70.4dB
Support resolution	1280*720P (Maxim Support 1280*960)
Output signal	AHD Analog HD
Support video format	PAL system as default
Frame rate	25fps
Supply voltage	VCC12V
Current	47mA105mA (+/-10%)
Power consumption	0.561.26W (+/-10%)
Operating temperature	'-20°-+70°
Storage temperature	'-25°-+80°
Aviation line length	0.57 meter



## **Why Choose Perfect Vision Products?**

### We Provide Excellent Services.

Our highly responsive customer care will be reaching out to you and addressing your issues, ensuring you've received the best service available in order to achieve maximum uptime of your equipment.

### Our Products are Meeting the Harsh Environmental Standards.

The quality of any product comes from its components. With the implementation of high quality materials combined with the best practices applied at every stage of the manufacturing process, our products perform efficiently under the most extreme and harsh environment. We have done extensive tests during the development and manufacturing stages in the real workplace environment. We have challenged many obstacles during our journey to present the best safety solutions to the market.

### All Features are Customizable as Required.

Proudly, our solutions have been developed in-house inside our advanced labs with experienced and talented engineers and researchers. We've got the know how knowledge. Whether you are looking for simple modifications in the system, adding more features, or even looking to integrate with other solutions, the R&D department at Perfect Vision will give their maximum effort and support to satisfy your requirements and get you up and running.





### We Offer Competitive Prices.

The relationship between price and quality is controversial. Customers usually tend to believe that high price is a signal of high quality, but this is not always the actual case. Our innovative way of work has enabled us to achieve exceptional quality products equipped with top-notch customer services while keeping the pricing competitive.

### **Technical Training Included.**

HSE studies show that lack of proper training is responsible for about 32 of the accidents in the worksites. That is why one of the Perfect Vision's top priorities is to provide appropriate technical training for all the provided safety solutions. Perfect Vision will make sure that all the aspects of its safety solutions are well understood and clear for the personnel in the workplace.

### After-Sale Services with 24/7 Customer Support.

Perfect Vision responsibility didn't end when the customers received their products. We deal with our customers as partners. And our unprecedented commitment to support our fellow partners is what makes us different.



## **Perfect Vision Certificates**









































