

MDVR8204SH

Mobile DVR 8-Channel 1080P GPS
4G WIFI Mobile DVR





MDVR8204SH

8CH 1080P 3SD Card AI Mobile DVR

The **MDVR8204SH** is a high-performance mobile digital video recorder featuring **8 channels** with flexible 1080P/720P/D1 resolution support and mixed NTSC/PAL (N/P) connectivity for seamless fleet integration. Its intelligent storage design utilizes a reliable **3-card configuration** (dual SD cards plus one TF card), with each slot supporting up to **512GB**, and includes a **built-in SSD socket** for expansion when high-capacity, long-term recording is necessary. Powered by a **built-in NPU (Neural Processing Unit)**, the unit is an expandable AI hub, ready to integrate advanced functions like DMS/ADAS/BSD, Driver Face Recognition, Alcohol and Tire Pressure Testing, Camera Coverage Alarm, and Motion Detection, while optional **4G, GPS, and WiFi** provide essential real-time connectivity and tracking capabilities.



- 8ch AI MDVR supports 8-channel AHD 1080P. If necessary, add one more channel IP 1080P camera.
- Supports three memory card slots, including two SD card slots and one TF card slot, and a single card supports up to 512GB.
- Supports Advanced Driver Assistance System (ADAS), Driver Monitoring System (DMS) and Blind Spot Detection (BSD) Optional.
- Compatible with ADAS cameras, AI face recognition cameras, and AHD cameras. Can connect single IPC Camera.
- Optional alcohol detection, tire pressure detection function and vibration seat cushion (fatigue driving vibration reminder).
- Optional UPS battery operation, supporting different UPS capacities to support delayed shutdown (1-3 hours).
- 4G, WiFi is optional.
- Easy to assemble and replace. Just replace the cable and upgrade different versions of software without disassembling the MDVR machine.

Features

Specifications

Applications

Accessories

8-CH Camera

8-channel 1080P/720P/D1 video (supports N/P mixing), built-in NPU algorithm capabilities, compatible with ADAS cameras, AI face recognition cameras, AHD cameras and IPC cameras. Multiple high-definition cameras, including front, side, rear and interior monitoring, are managed by a central AI-driven DVR unit. The system supports real-time video recording and analysis.

Video

The device supports 2SD+1TF card storage, and a single card supports up to 512GB capacity. There is an SSD slot in the device, and you can add an SSD according to your needs. The stored video is recorded in a loop through the SD card and TF card, and the loop deletion (the oldest video is deleted) maintains longer video storage and supports SD card loop recording, TF card mirroring, and supplementary recording.

Alcohol testing

Supports alcohol detection. The device can control the vehicle ignition when connected to the vehicle. The driver can check whether he has been drinking before getting in the car. If he has not been drinking, the vehicle can be started normally. If the driver wants to start the vehicle after drinking, the device will lock the vehicle ignition, reminding the driver that he has been drinking and cannot drive the vehicle, and report the driver's drinking alarm to the platform to ensure the driver's safety.



Driver Assistance (ADAS)

ADAS intelligent assisted driving system can monitor the distance between the vehicle and the vehicle in front in real time, issue collision warnings, and remind the driver to change lanes. It will also issue warnings to the driver to ensure the driver's road safety.

Driver Monitoring System (DMS)

Driver Monitoring System (DMS) can be Used in conjunction with the Vibrating Seat Cushion (optional), it can detect and remind the driver of various unsafe driving behaviors, including smoking, mobile phone use, driver distraction, fatigue driving, and when the driver's face is not in the detection area, the Vibrating Seat Cushion can vibrate when the driver is driving fatigued to achieve the purpose of reminding the driver to drive safely.

BSD (Optional)

Optional BSD (Blind Spot Detection) can address the issue of blind spots caused by the driver's restricted rearview mirror view. It includes a pedestrian observation system, providing an additional layer of protection for the driver.



Note: Peripheral cameras are sold separately.

- | | | |
|--|--|--|
|  8CH AHD |  GPS/BD |  Alcohol testing |
|  Fleet Monitoring
VIA CMS PLATFORM |  3G/4G/5G |  Advanced Driver
Assistance System |
|  TPMS
(Tire Pressure
Monitoring System) |  WI-FI Location |  Driver monitoring system |
|  I button
(swipe card to turn on
the device) |  2SD+1TF
max 512GB |  Blind spot detection system |

QOHO MDVR8204SH AI Mobile DVR: Optimized Storage and AI Safety for Fleets

The **MDVR8204SH** is an **8-channel, Mobile DVR** with a powerful **built-in NPU** for advanced AI-driven features like **DMS, ADAS, and BSD** (optional). It boasts flexible and extensive storage via a **3-card design** (2 SD + 1 TF), supporting up to **512GB per card**, along with a reserved slot for an optional **SSD**. The unit includes **GPS/BD positioning** and is compatible with various optional peripherals, including **alcohol detection** (with ignition lock), **TPMS**, and **4G/5G/WiFi** connectivity, making it a comprehensive solution for intelligent fleet safety and monitoring.





MDVR8204SH

8CH 1080P 3SD Card AI Mobile DVR


AI Features
ADAS, BSD & DMS


3 SD Card Slot


8CH MDVR
EXTERNAL CAMERAS


mSATA SSD


Fleet Monitoring
VIA CMS PLATFORM


GPS & 4G


**1080p
FULL HD**
HD Resolution

Features

Specifications

Applications

Accessories

System

system: Linux
language: English, Chinese, Hungarian, other optional
Operation Mode:
User interface, controller, mobile app, network
CPU:
Novatek NT98323
Internal Memory:
DDR3 4GBIT Flash 128M Nand
Power consumption:
Bare device: ≤4w
Fully functional: ≤60w
Applicable vehicles (power supply):
8~36V voltage vehicle can run, optional additional UPS (battery) support, different capacities can be selected 1-3 hours

Power

Voltage input:
1. The input voltage is +8V ~ +36V, if the voltage is lower than 8V or higher than 36V for a long time, the device will automatically shut down and enter the protection mode.
2. Output voltage is 12V(+/-0.2V), The maximum current is 3A. Output voltage is 5V(+/-0.2V), The maximum current is 1A.

VIDEO

Preview function: Supports 8-screen splicing for preview, which can be event-triggered to switch between full-screen and splicing display.
Frame rate 1080P: maximum 120 frames/sec 720P: 240 frames/sec NTSC: 240 frames/sec Single channel maximum: 30 frames/sec
Resolution Supports 1080P, 720P, and D1 encoding formats.
Picture quality level 1 to 7 levels can be configured, where level 1 is the best and level 7 is the lowest.
Code rate (Bitrate) Options D1: 512, 768, 1024 (three levels optional) 720P: 1024, 2048, 4096 (three levels optional) 1080P: 2048, 4096, 6144 (three levels optional)

UPS

5x7F*2.7V:
1. Power on and charge, and it will be fully charged in 3 minutes. Even if the external power fails, the system can still operate for 10 seconds and continue to complete data saving and shutdown.
2. To ensure that the device does not restart when the input power is unstable.
3. Built-in UPS polymer battery optional (1-3 hours), built-in interface and fixed position as standard configuration
Car Key (ACC) Signal :
≤6V The car key is off
≥7V The car key is on

Record

The mdvr8204sh records video and data onto a mix of storage media, supporting up to two 1TB SD cards, plus one MicroSD card and one MSATA SSD for reliable, large-capacity storage.

Video Mode

The device offers multiple recording modes (manual, alarm, timed, mirror) and records by default. You can search footage by time, type, or storage location. Video playback supports viewing up to 4 channels simultaneously on the device, including analysis of vehicle data. Playback controls include fast forward/rewind at speeds up to 16x, pause, play, and time selection.

Sensors & Interfaces

RS232/458:
2xRS232, 1xRS485
Can connect alcohol detection sensor, tire pressure detection sensor, LED control panel and other peripherals through preset interface
USB:
Usb2.0, the front USB shell is used for data export and upgrade
1-Wire:
1-wire support for I Button

MDVR Player

Support CMS platform for download/playback and history. The stored video is in an encrypted format and can be played through the MDVR player software.

GPS-TIME

Built-in global positioning system (GPS) module and antenna, which can realize real-time positioning, speed detection, GPS time synchronization, and report location information to the CMS platform in real time, facilitating fleet management

3/4/5G

Compatible with 3/4/5G:
Optional modules
EVDO/TD-SCDMA/WCDMA/TDD-LTE/FDD-LTE, etc.

WIFI

Optional built-in WIFI module and antenna
WiFi makes MDVR menu settings simple, eliminating the need for a remote control
Support wireless video download
802.11b/g/n/ 2.4G/5.8G optional

Communication port

RJ45 Network:
1 × RJ45 for expansion connection of IPC camera
USB interface:
2 USB 2.0 ports, front panel for downloading video files and upgrading firmware; rear panel for backing up records and connecting to firebox

Input/Outputs

6*I/O Alarm output
(12V/GND)
Can receive level signals such as turn signal to trigger alarm

Talkback

Monitoring function:
You can use the CMS platform to initiate monitoring broadcasts

G-sensor

Automatically correcting and doing not limit the installation direction of the equipment

Features

Specifications

Applications

Accessories

max 2*1TB SD card+1*Mic SD card+1*MSATA SSD

+8-36V

GPS/BD

SIM3/4G/5G

WIFI

Breathalyzer

Optional AI



Sim Card

SD Card Slot 1

MicroSD Card Slot

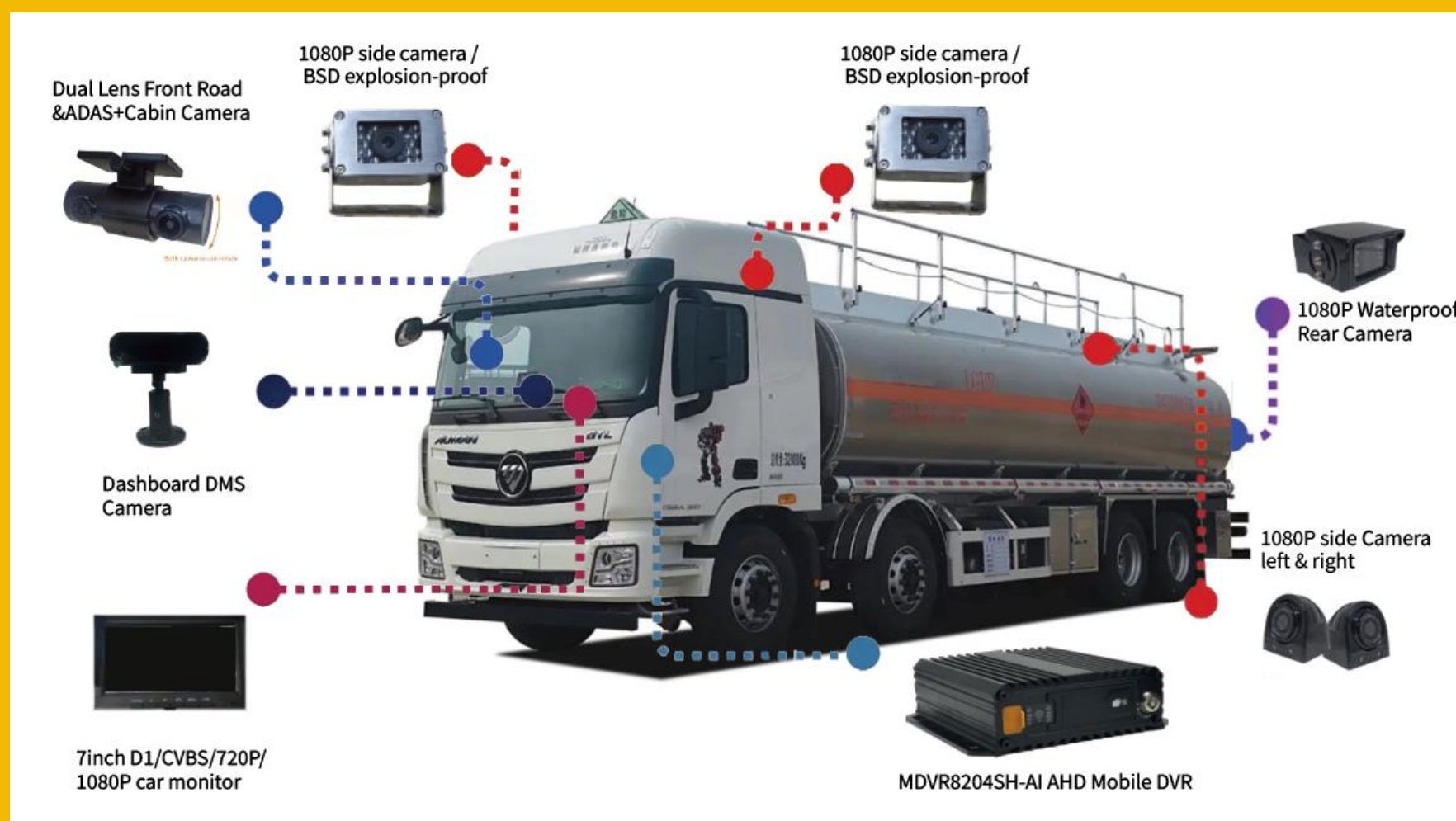
SD Card Slot 2

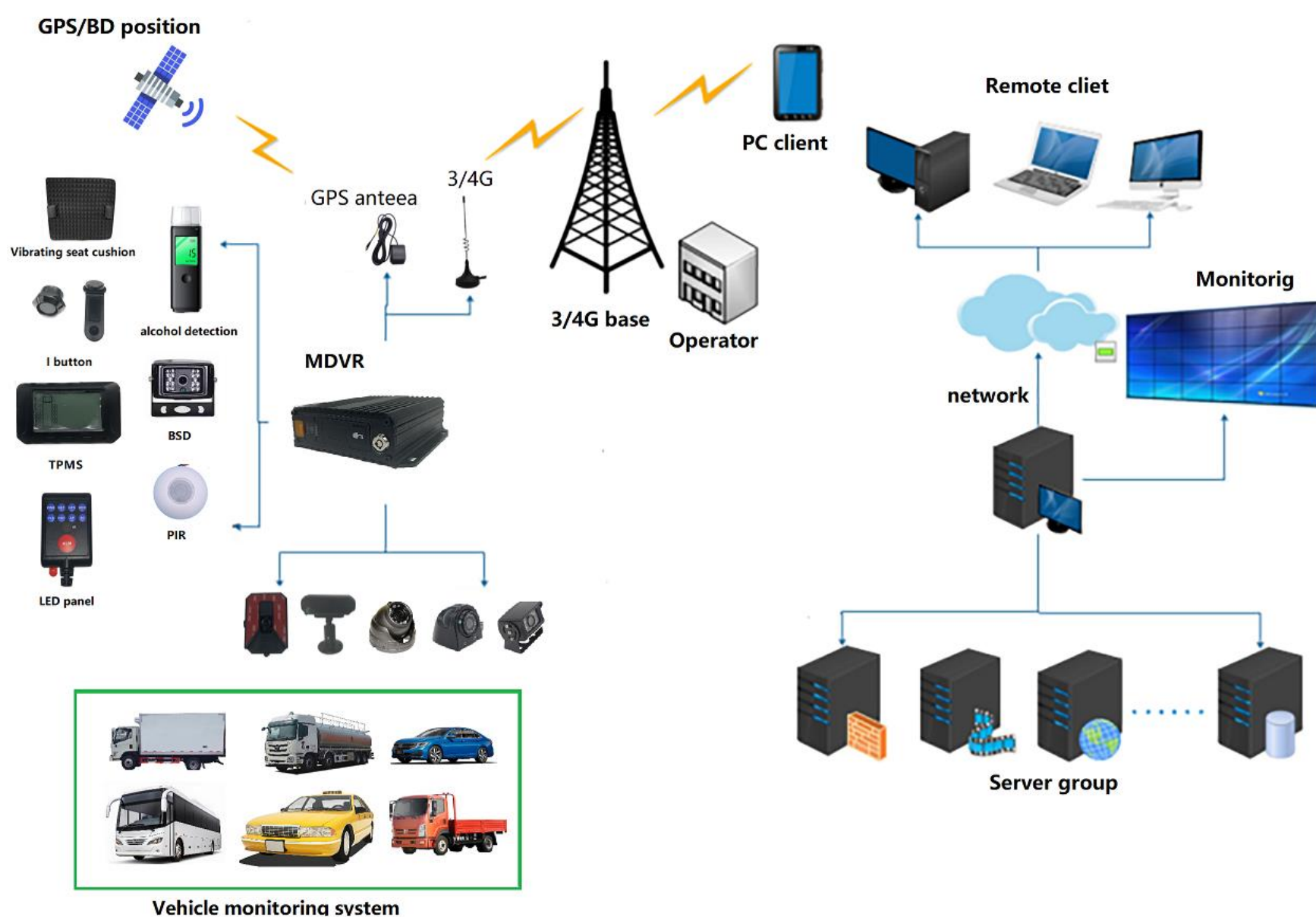


Container Truck Installation



Fire Truck Installation





APPLICATION



Dump Truck



Transport Bus



Fire Truck



School Bus

Features

Specifications

Applications

Accessories



remote control



I/O Alarm cable 28 Pin



video/audio output cable



Keys



Spanner



GPS Antenna



WIFI Antenna



3/4G Antenna



Hand microphone (AI)



CVBS with monitor (optional)



VGA with monitor (optional)

Optional peripherals:



Vibrating seat cushion



I button (optional)



Tire pressure sensor



Alcohol testing



BSD



PIR (motion sensor)



LED panel