



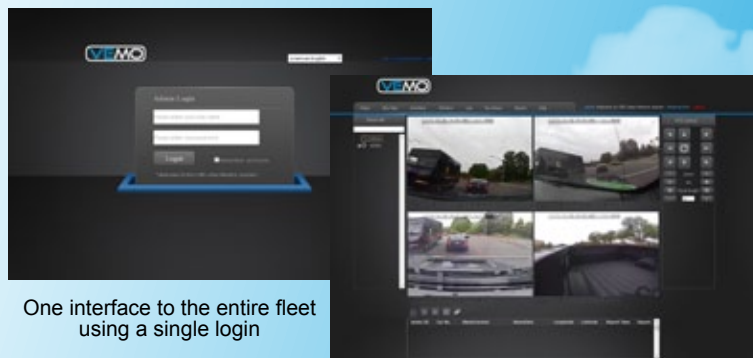
VEMO® 4000 Series In-Vehicle Video Surveillance System Enabled for Sentir® Cloud Video Management Platform

In-vehicle video surveillance is increasingly being incorporated into the security solutions of transport operators in the government, commercial, and private sectors. The need for both real-time and recorded video verification to increase situational awareness, reduce theft, and prevent violence and fraud, as well as improve operating efficiencies, is motivating fleet managers and transportation authorities to consider mobile video surveillance systems as a critical part of their business management and security measures. Furthermore, the increased use and deployment of wireless infrastructure is making it easier to integrate real-time video streaming with mobile video surveillance equipment.

VEMO 4000 is an in-vehicle video surveillance system that records events from inside and outside the vehicle. With three mobile digital video recorders (MDVRs) and six cameras to choose from, VEMO 4000 provides a solution for a wide variety of transportation surveillance needs. This untethered solution utilizes cellular service from selected providers.

Sentir provides VEMO 4000 mobile streaming video functionality. Live and recorded video can be accessed 24/7 from any Internet-enabled device. Monitor a single vehicle or an entire fleet of vehicles on a single Web dashboard using a single login. Video may be viewed by multiple users simultaneously for up-to-the-minute situational awareness. Recorded video clips are time and date stamped for easy retrieval.

VEMO 4000 is a fully-integrated, cloud-enabled, in-vehicle video surveillance system.



One interface to the entire fleet using a single login

VEMO 4000 Series In-Vehicle Surveillance System Provides:

- Easy Plug-and-Play Installation – up to 8 Cameras
- Real-time Streaming of Live Video into the Cloud via 3G/4G Module
- Simultaneous Video Recording with Audio, G-force Sensor (Accelerometer) and GPS
- OBD II Device integration
- Data H.264 Video Compression Provides High Quality Video with Minimal Lag Time
- Easy to Deploy from 1 to 1000s

Centralized video management of an entire mobile fleet includes high quality real-time streaming video and instant review of footage remotely, thus no need to have a recording device onboard or wait to download video at the end of the day.

VEMO 4000 has many government, commercial and private sector applications:



Law Enforcement

Protect Life, Support Officers and Reduce Response Time

When life is on the line there's no time to call in for backup or rewind the turn of events. So, why risk a delayed response when you can have someone watch your back? Cloud-hosted VEMO is just like having a virtual partner. Command center and/or other police officers can log in to the camera in the vehicle to assess the situation and send immediate help to the officer in distress.



Emergency Response Vehicles

Improve Safety, Save Lives and Get Critical Information as Events Unfold

In times of crisis and emergency response, it is critical to mobilize and stay connected. Cloud-hosted VEMO offers simple live remote user access to extend capabilities in the field where you need them most. Real-time situational awareness is a tremendous benefit for first responders that can serve as a force multiplier saving lives and providing mission-critical information to multiple stakeholders simultaneously.



School Bus

Stop Bullying, Protect Students, Stop Graffiti and Prevent Liability

With bullying on the rise, parents are more concerned than ever when it comes to protecting their children. A school bus is an ideal place for bullies to terrorize vulnerable students because there is no place for the victims to run and there are no adults present, except for the preoccupied bus driver. Cloud-hosted VEMO can help catch bullies in the act and prevent serious harm to the victims. With a camera in the bus, events may be viewed in real time and a call made to either the bus driver or the police to report bullying in progress.



Taxi Cab

Protect Drivers, Deter Violence, Prevent Robbery and Mitigate Insurance Claims

Taxi cab driving is considered one of the top 10 most dangerous jobs. With more than 234,000 taxi cab drivers on the road in the United States alone, many carry cash which makes them more likely to be victims of crime. When it is late at night and your driver is all alone, there may be no time to call for help; real time video accessible from headquarters may be a life saver. With cloud-hosted VEMO, not only can dispatchers monitor driver behavior but they can watch over drivers to mitigate the risks associated with dangerous circumstances they may encounter driving in dangerous urban neighborhoods late at night, taking home patrons of taverns and clubs, robberies and vehicular accidents.



Commercial Transportation

Monitor Assets, Improve Operations, Provide Driver Safety and Reduce Cargo Theft and Damage

With approximately 2.3 million large trucks operating and annual cargo theft at \$8-12-billion in the U.S. alone, remote video monitoring of commercial transportation vehicles offers tremendous value. Active video monitoring of transportation assets can help provide cargo management and supply chain integrity from origin to destination. With cloud-hosted VEMO, fleet managers and transportation companies can mitigate risks associated with cargo theft, spoilage, and damage.



Public Transportation

Improve Safety, Verify Operator Actions and Reduce Frivolous Lawsuits

In the United States alone, commuters make more than 10.5 billion trips each year using public transportation, riding onboard vehicles that travel more than 5.3 billion miles annually. Whether traveling by bus, train or any of the other transit vehicles in use across the country, passenger security is becoming an increasingly important topic. Cloud-hosted VEMO provides transit companies with the ability to monitor the driver and passenger areas to head off trouble and mitigate the risks associated with serving the public.





MDVR Specifications



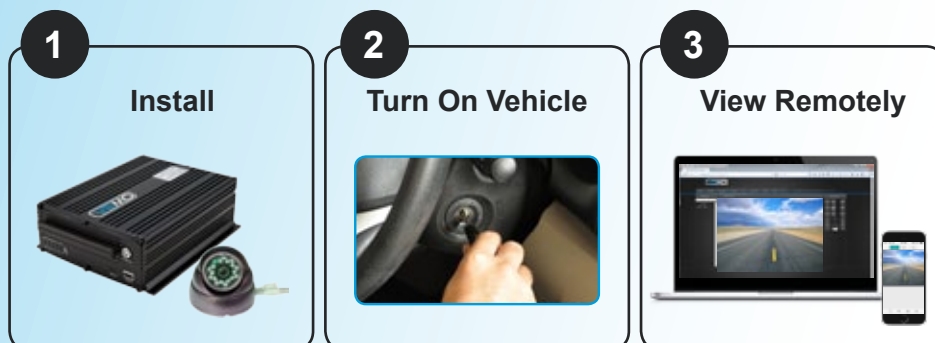
Model:	VEMO-4030	VEMO-4020	VEMO-4010
Channels	8 channels	4 channels	4 channels
Main Chip	Hi-3531	Hi-3515	Hi-3515
Video Input	8ch Independent Input: 1.0Vp-p, 75Ω. Both B&W and Color Cameras	4ch Independent Input: 1.0Vp-p,75Ω. Both B&W and Color Cameras	4ch Independent Input: 1.0Vp-p 75Ω. Both B&W and Color Cameras
Audio Input	8 Channels Independent Input 600Ω	Four Channels Independent Input 600Ω	Four Channels Independent Input 600Ω
Video Output	1 Channel PAL/NTSC Output, 1.0Vp-p, 75Ω, Composite Video Signal	1 Channel PAL/NTSC Output, 1.0Vp-p, 75Ω, Composite Video Signal	1 Channel PAL/NTSC Output, 1.0Vp-p, 75Ω. Composite Video Signal
Audio Output	1 Channel (8 Channels Can Be Convert Freely)	1 Channel (4 Channels Can Be Convert Freely)	1 Channel (4 Channels Can Be Convert Freely)
Compression	H.264 high profile	H.264 main profile	H.264 main profile
Storage	HDD, 2TB max	HDD, 1TB max	SD card , 2*64GB max
Recording	Full 960H/ D1 real time recording	Full D1 real time recording	Full D1 real time recording
Interface	VGA / USB 2.0	USB 2.0	USB 2.0
Sensor In/Out	8 channels input, 2 channels output	4 channels input, 1 channel output	4 channels input, 1 channel output
Network Interface	<ul style="list-style-type: none"> ■ LAN Port ■ WIFI ■ 3G 	<ul style="list-style-type: none"> ■ LAN Port ■ WIFI ■ 3G 	<ul style="list-style-type: none"> ■ LAN Port ■ WIFI ■ 3G (cannot use 3G and LAN Port in the same DVR)
Extended Interface	<ul style="list-style-type: none"> ■ GPS ■ RS485 & RS232 ■ G-Sensor ■ Intercom 	<ul style="list-style-type: none"> ■ GPS ■ RS485 & RS232 ■ G-Sensor ■ Intercom ■ SD card slot 	<ul style="list-style-type: none"> ■ GPS ■ RS485 & RS232 ■ G-sensor ■ Intercom
Power Circuit Connection	Pin Aviation Connector	Pin Aviation Connector	Pin Aviation Connector
Power Consumption	DC8-36V 5% ≤12W	DC8-36V 5% 8W (without HDD)	DC8-36V 5% 8W (without HDD)
Operating Temperature	-4 °F ~ +185 °F (-20 °C ~ +85 °C ≤80%)	-4 °F ~ +185 °F (-20 °C ~ +85 °C)	-4 °F ~ +185 °F (-20 °C ~ +85 °C)
Dimensions (L x W x H)	9.64 in x 7.48 in x 2.80 in (245 mm x 190 mm x 71 mm)	8.35 in x 8.27 in x 2.68 in (212 mm x 210 mm x 68 mm (with holder))	6.06 in x 7.48 in x 2.05 in (154 mm x 190 mm x 52 mm)
Weight	6.61 lbs (without HDD) (3.0 kg (without HDD))	4.19 lbs (without HDD) (1.9 kg (without HDD))	1.98 lbs (without HDD) (0.9 kg (without HDD))

Camera Specifications



Model:	VC-420	VC-421	VC-422	VC-431	VC-620	VC-4318PTZ
Camera						
Image sensor	1/4" SHARP CCD/ SONY CCD	1/3" SONY CCD	4" SHARP CCD/ 1/3" SONY CCD	1 1/3" SONY CCD	CMD	1/4" Color CCD
Resolution	420 TV Lines	420 TV Lines	700 TV Lines	700 TV Lines	420 TV Lines	480 TV Lines
Lens	3.6 mm	3.6 mm	3.6 mm	3.6 mm	2.8 mm / 120°-- 1.8 mm / 170°	f=4.1~73.8 mm 18x
Min illumination	0 LUX / F1.2	0 LUX / F1.2	0 LUX / F1.2	0 LUX / F1.2	0.2 LUX / F1.8	0.01~1 LUX
IR working distance	16 ft - 49 ft (5 m - 15 m)	16 ft - 49 ft (5 m - 15 m)	16 ft - 49 ft (5 m - 15 m)	16 ft - 49 ft (5 m - 15 m)	16 ft - 49 ft (5 m - 15 m)	390 ft (120 m)
IR LEDs	24pcs	24pcs	24pcs	12pcs	12pcs	36pcs
Shutter time	1/50(1/60) - 1/100 ~ 000 sec	1/50 (1/60) - 1/100 ~ 000 sec	1/50 (1/60) - 1/100 ~ 000 sec	1/50 (1/60) - 1/100 ~ 000sec	1/50 (1/60) - 1/100,000 sec	1/3 ~ 1/10000 sec
General						
Casing	Plastic	Metal	Metal	Metal	Metal	Metal
Power Supply	DC12V	DC12V	DC12V	DC12V	DC12V	DC12V $\text{lin} \geq 3.5\text{A}$
Operating Temperature	-4 °F ~ 158 °F (-20 °C ~ +70 °C)	-4 °F ~ 158 °F (-20 °C ~ +70 °C)	-4 °F ~ 158 °F (-20 °C ~ +70 °C)	-4 °F ~ 158 °F (-20 °C ~ +70 °C)	-4 °F ~ 140 °F (-20 °C ~ +60 °C)	-31 °F ~ 131 °F (-35 °C ~ 55 °C)
Dimensions (L x W x H)	3.66 in x 3.66 in x 2.56 in (93 mm x 93 mm x 65 mm)	3.70 in x 3.70 in x 3.15 in (94 mm x 94 mm x 80 mm)	2.87 in x 2.36 in x 3.46 in (73 mm x 60 mm x 88 mm)	2.00 in x 2.00 in x 2.36 in (51 mm x 51 mm x 60 mm)	0.82 in x 1.5 in (21 mm x 38 mm)	14.65 in x 11.81 in x 9.37 in (372 mm x 300 mm x 238 mm)
Weight	0.46 lbs (210 g)	0.90 lbs (410 g)	0.71 lbs (320 g)	0.38 lbs (173 g)	0.40 lbs (185 g)	22 lbs (10 kg)

Other in-vehicle camera types and dashboard monitors are available. Lens and resolution options are available on certain models.



Go LIVE in 3 easy steps.