

## **3CH Professional Driving Recorder for Specialist**

**EOS-Secure**



Made in Korea



Eye of Security

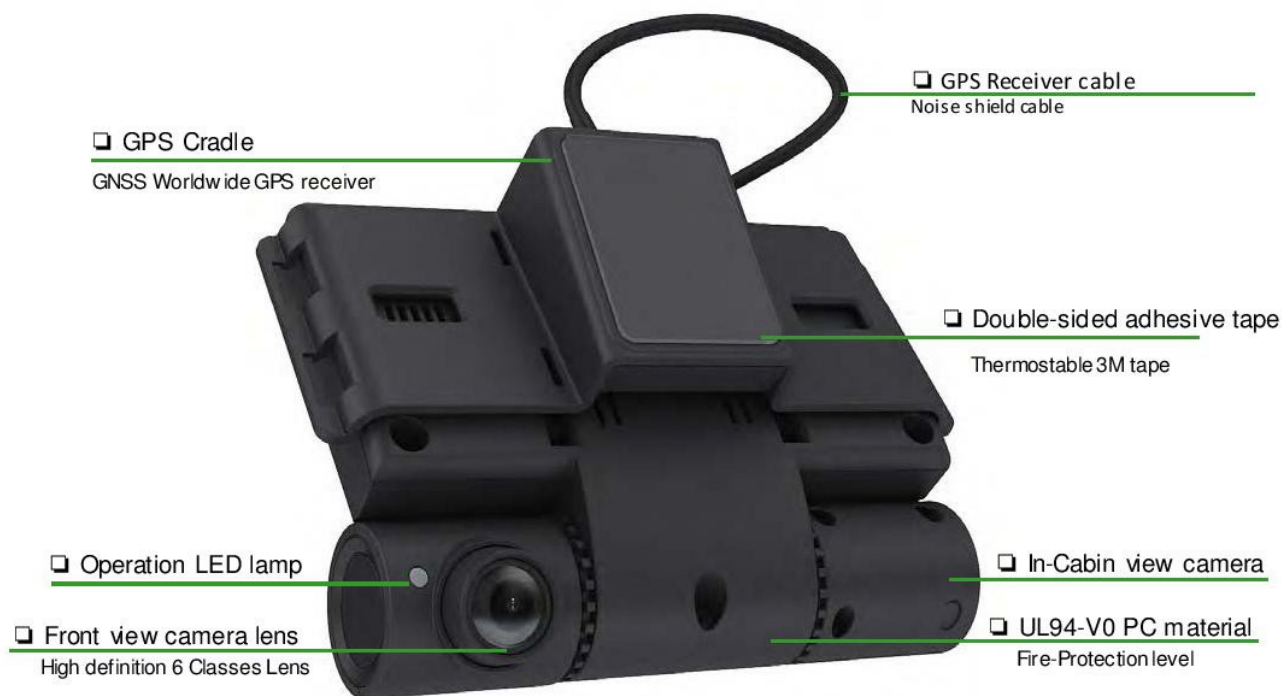


## ***3ch Drive Recorder for HD Special***



**EOS-Secure**





[Picture 2] Out side view from Vehicle



[Picture 3] In side view in Vehicle



□ Specifications / ***EOS-Secure Series***

Category		Descriptions	Remarks
CPU		Coretex-A8 (800MHz) processor	Linux ARM
Camera	1st-Front	1.3 MEGA Pixels HDCMOS Sensor	1280 x 720p (HD)
	2nd-InCabin	1.3 MEGA Pixels HDCMOS Sensor	1280 x 720p (HD)
	3rd-Rear camera	NTSC Analog composite	(D1 720 x 480p), Optional
Camera Angle		114.39(H), 61.98(V), 134.4(D)	
RAM		256 MB	Samsung
Nand Flash Memory		128 MB	Samsung
G-sensor		3-Axial acceleration sensor	up to ±8G
Speaker / MIC		Mono Speaker / Internal MIC	
Super capacitor		DC 5V / over 5F	-40℃ to +85℃ Industrial Level
GPS Module Ant.		GNSS /External GPS Antenna support	
Removeable storage		micro SDHC(MLC) x 2 slots	64GB support / Total 128GB use
Video out put		NTSC/PAL	Ear phone jack to RCA
External interface	GPS signal	2.5Ø4PIN earphone jack	
	USB	USB Type-A	USB2.0 support
	Rear camera	2.5Ø4PIN earphone jack	Vehicle back gear signal support
	micro USB	Micro-USB Type B	USB2.0 support
	DC Input	3.5ØDC input jack	
	AV-Out	2.5Ø 4PIN ear phone jack	Y type cable use for foot s/w
Video Encode	Format	mp4 / H.264	
	Mode	2 Channel use	3 Channel use
	Front	4Mbps / @30fps	4Mbps/ @30fps
	InCabin	2Mbps/ @30fps	2Mbps/Max.@15fps
	Rear	-	512kps/Max.@15fps
Audio Encode		PCM	Monaural, 22.05Khz, 16bits
Recording		All time recording	One file / min(60s±1s)
		Button_Event recording)	Before 15 sec.±0.25s after 15 sec.±0.25s (total 30 sec.)
		Panic_Event recording)	
		G-sensor_Event recording)	
Devices in DR		Battery for RTC backup	3V/over 500mAh primary battery
		Push button for manual event recording	
		Over 4 IR_LEDs for InCabin camera	IR_LEDs are turned on and off automatically depends on surrounding Illuminance

❑ Specifications / ***EOS-Secure Series***

Category	Descriptions	Remarks
Operating power voltage	DC 8V ~ 32V	DC 12V / DC 24V support
Operating temperature	-20℃ to +85℃	
Storage temperature	-30℃ to +95℃	
Dimension (mm)	109(w) x 82(H) x 19(D)	Main body except projection of camera
	121.9(W) x 104.2(H) x 46.1(D)	Main body including GPS cradle and cover case except projection of camera
Weight	Main device: 138g / GPS Cradle : 42g	Assembled all the part: 180g
Warranty Period	3 years after purchase	
MTBF	10 years	
Product guarantee period	7 years	
Market defect rate	Under 0.25%	
UL Standard	UL94-V0	
Certificate	RoHs, CE, FCC	
Product Origin	South Korea	

**Package Contents / *EOS-Secure Series***



**EOS-Secure Main Device**



**GPS Cradle**



**Tamper-Proof Case**



**Hexagonal Screw**



**Hexagonal L-Wrench**



**Digital User Guide**



**Rear Camera**



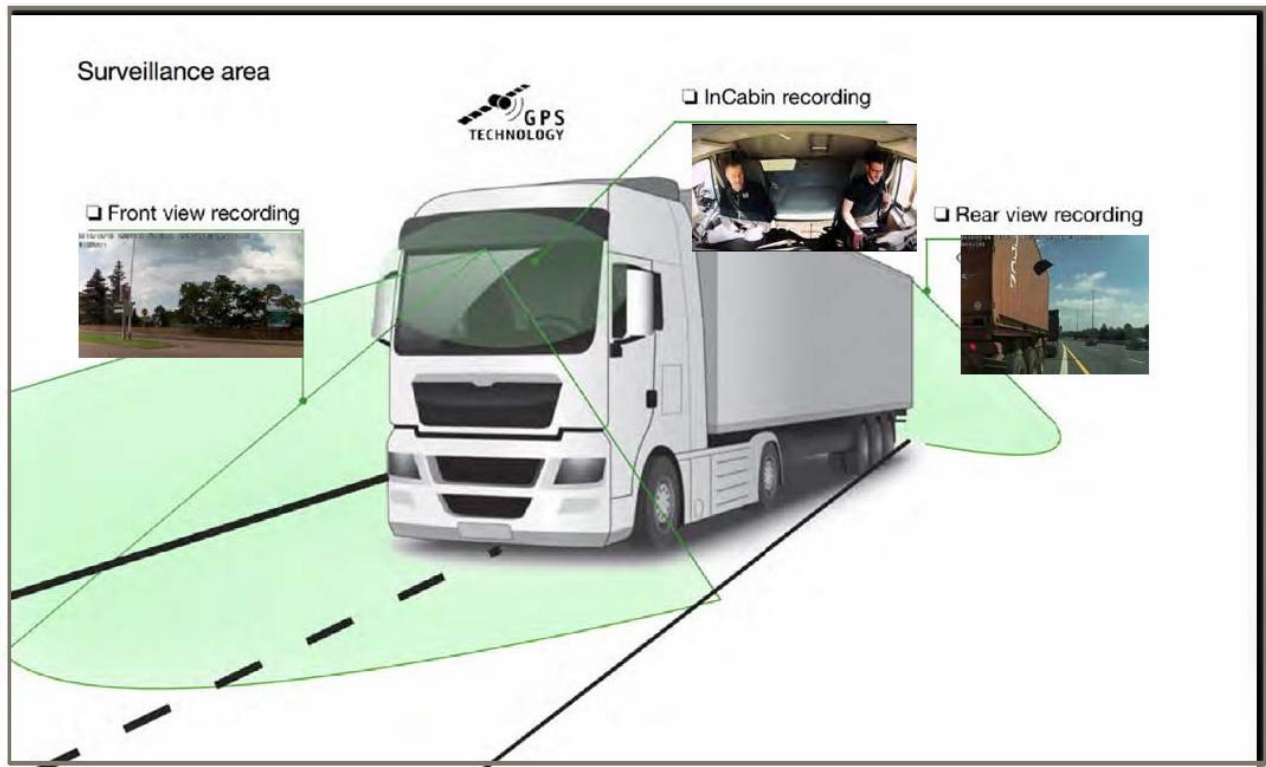
**DC Fuse Power Cable**



**Cable Fixing Tie & Clips**

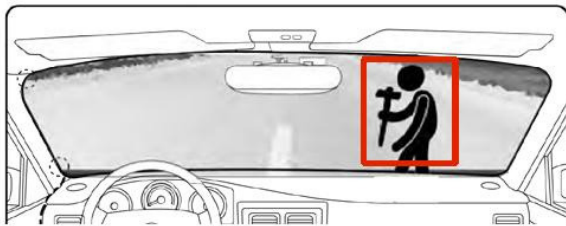


**Package Box**



### ❑ Automatic Motion-Detected Recording

The vehicle is safely managed by detecting motion during parking and recording the surrounding situation. Also, if the vehicle moves during a motion recording, continuous recording is automatically started.



### ❑ Automatic Emergency Recording

When an impact is detected by the embedded G-sensor, the scenes from 15 seconds before the accident till 15 seconds after the accident are separately saved to conveniently secure and manage the accident images.



### ❑ Cycle recording

During recording, the video images are saved in 60 seconds unit. If the capacity of the micro SDHC card runs short, the images from the oldest ones are automatically deleted.



### ❑ Wi-Fi / LTE Telecommunication(option)

This wireless function is optional item for FMS(Fleet Management Systems) Cloud server user. Track purchaser will easy join our FMS Cloud.





### High Speed & Performance CPU

EOS-Secure system operates stably as the image Processing time is reduced by adopting a high performance CPU (Cortex A8 800MHz), and the fast speed further strengthens the stability.



### Support 128GB large memory storage

EOS-Secure has two(2) slots for removable micro SDHC cards each 64GB memory support. One micro SDHC slot is 'Primary memory slot' and other one is using 'Secondary memory slot'. Removable micro SDHC card slot are able to protection via Tamperproof case from driver's behavior



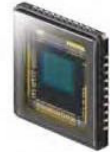
### High-Definition HD & 6 Glass Prime Lens

EOS-Secure has two(2) built in High-definition HDCMOS image sensor and all glass prime lens. Glass lens has wonderful performance then plastic lens in high-temperature environment. Glass lens are provide high quality recorded video image. EOS-Secure is recording 2 of 1280x720p resolution at 30 fps.(Front & InCabin view)



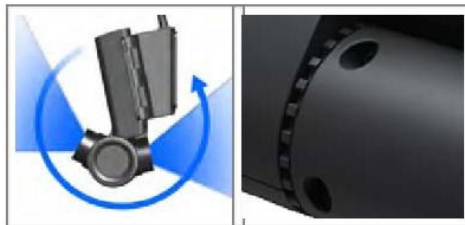
### WDR & Auto Image Control Technology

1/3" Digital HDCMOS image sensors are provide automatic controls for Image quality. Automatic exposure control(AEC), Automatic gain control(AGC), Automatic black level calibration(ABLC), Automatic white balance(AWB), Automatic Wide Dynamic Range(WDR)



### Rotatable Camera for any angle fit

EOS-Secure is designed for all type windscreen via rotatable camera modules Front/InCabin's camera modules are able to lock for rotate angle via Tamperproof case. Each camera modules are able to lock up by tamperproof case.

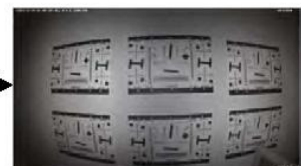


### Wide infrared camera for Darkness

EOS-Secure is designed for 100% darkness environment recording to InCabin area for safety driver. EOS-Secure has wide and clearly angle IR recording in the Darkness.



Our other IR model



Wide angle IR REC

### CCTV Live Monitoring with Recording

EOS-Secure provide CCTV mode interface for Live Video monitoring at the driver seats.

- Mode 1: Front view.
- Mode 2: Front view & InCabin view
- Mode 3: Front view & InCabin view & Rear view (while signal detecting)
- Mode 4: Rear(Dome) view.



### Built-in GPS receiver (Worldwide support)

- MediaTek MT3337 Single Chip
- DGPS(WAAS/EGNOS/MSAS/GAGAN), QZSS support
- GPS built in cradle
- RoHs compliant
- Google Maps use



## ❑ Built-in Acceleration sensor

3-Axis accelerations sensor built-in. EOS-Secure driving recorder is monitoring 3-Axis sensor detect for vehicle movements. EOS-Secure is operating automatic sensor calibration in each type of vehicle.



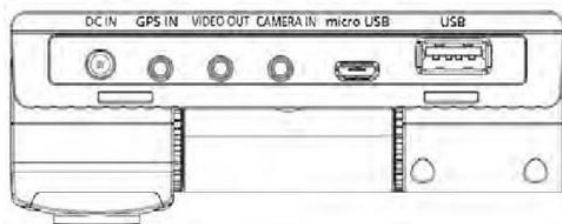
## ❑ Event file folder / Data LOG

- EVENT file: Create before 15 sec.±0.25s after 15 sec.±0.25s (total 30 sec.)
- ALL TIME file: Cycle recording (overwrite to oldest file) / 1 file's term is 1 minute.
- LOG file: G-sensor log, GPS log and Accident log are able to open by Microsoft Excel®



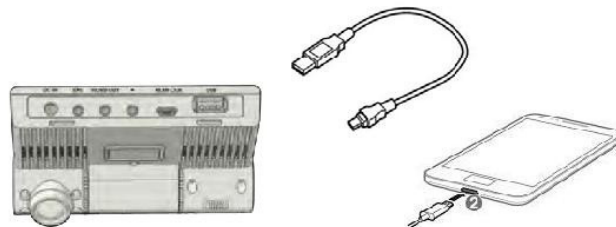
## ❑ Several Interface Terminals

EOS-Secure has several interface terminal for high performance and integrate with other external devices as like **smartphone, smartPAD, wireless LTE modem, Wi-Fi modem, OBDII scanner etc.,**



## ❑ Configurations by Smart phone & PC

EOS-Secure is able to set up function via smart-phone application's control or PC manager by administrator or user.(Customize)



## ❑ High Temperature performance

EOS-Secure is designed for operating performance in High-Temperature environment. The product has passed temperature test between -20℃ to +85℃ while 96 hours operating.



## ❑ UL94-V0 Anti-Fire base material

EOS-Secure is designed case & PCB by fire retardant material based on UL94-V0 for Fire-protection.



## ❑ Reliability test passed ISO16750 Level

EOS-Secure is designed for high performance operation depends on ISO16750 level so we guaranty that EOS-Secure will not be made frequency trouble with other electronic device and it is strong for static(electricity) shock.



EMI/ESD Protects

10Kv

## ❑ Warranty expandable, 10 years MTBF

Our offer is world-class quality by global international quality management activities. We provide years(Optional) warranty and 10 years MTBF.







1. Joint Tamperproof case with Special shape screw

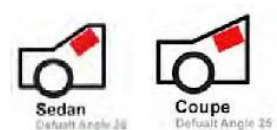
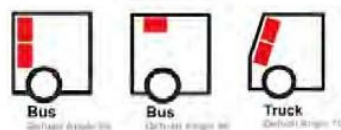
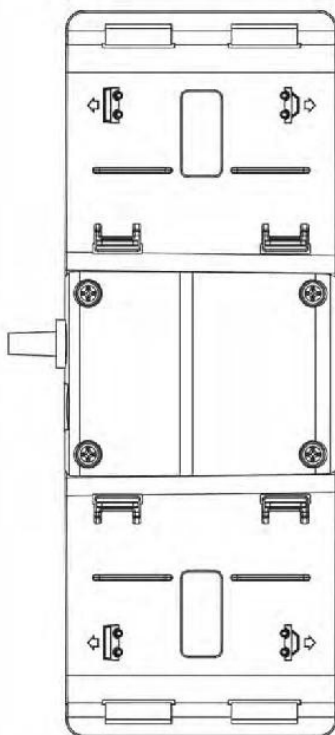
2. Lock up to All cables connection & angles of Cameras

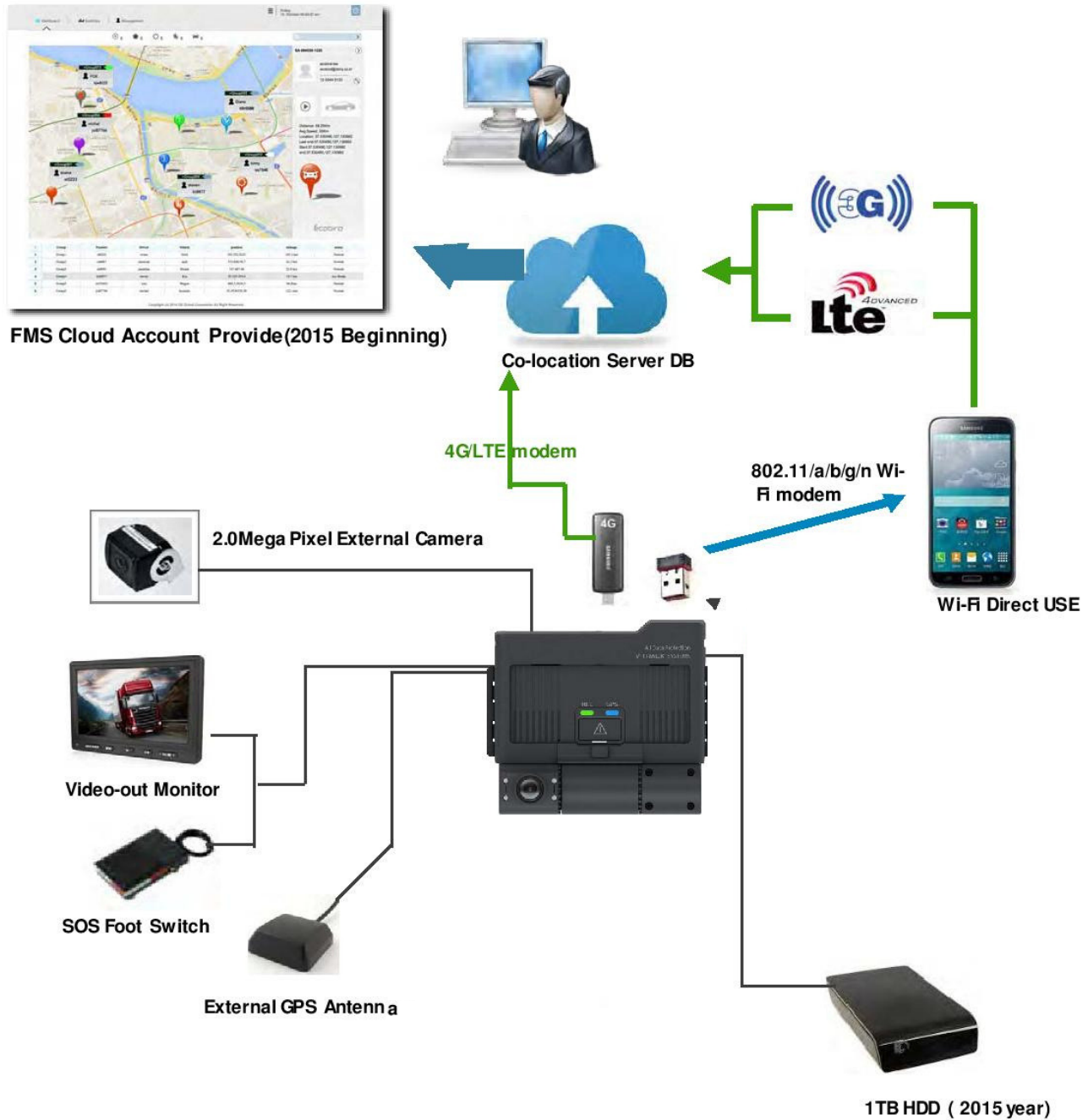
3. Lock up to All micro SDHC card slots



#### Uni-body angle cradle for all type Vehicles

-EOS-Secure is designed for all type windscreen install in the vehicle as like H D truck, Bus, and Ben etc.,  
-Installer is able to easy find for install direcBon icon from back side of GPS cradle.





## EOS FMS Viewer & Eco Software

