# Performance Requirements
# Video Data Recorder for Road Vehicle accidents

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# 1. What is the Video Data Recorder(VDR) for Road Vehicle accidents?

- Video Data Recorder

  This device records video data for a few seconds before and after an accident using a camera when the road vehicle happens to be involved with that accident, and this is not practically connected to the vehicle's inner system.

- EDR (Black box)

  The device, recording video data continuously during the operation of the vehicle, captures much more data than the VDR, which is commonly used in airplanes and ships.

# 1. What is the Video Data Recorder(VDR) for Road Vehicle accidents?

| | DTG (Digital Tachograph) | EDR (Event Data Recorder) | VDR (Video Data Recorder) (= Driver Recorder; Japan) |
|---|---|---|---|
| Purpose | Continuous Data Recording During Driving | Data Recording at Accident | Data Recording at Accident |
| Required Recording Data | Vehicle Speed, Acceleration, Distance, Time, Engine RPM, Position, Brake, … | Vehicle Speed, Throttle, Brake, Safety Belt, … | Front Camera, Acceleration, Accident Time, Serial Number |
| Market Type | Before/After Market  | Before Market  | After Market  |
| Applied Vehicle Class | Commercial Vehicles (Bus, Truck, Taxi) | All Vehicles | All Vehicles |
| Standards | - ISO 16844<br>- KS R 5072 | - IEEE 1616<br>- KS-R-5076 | - No International Standard<br>- KS-R-5078 |

## 2. Purpose and market status

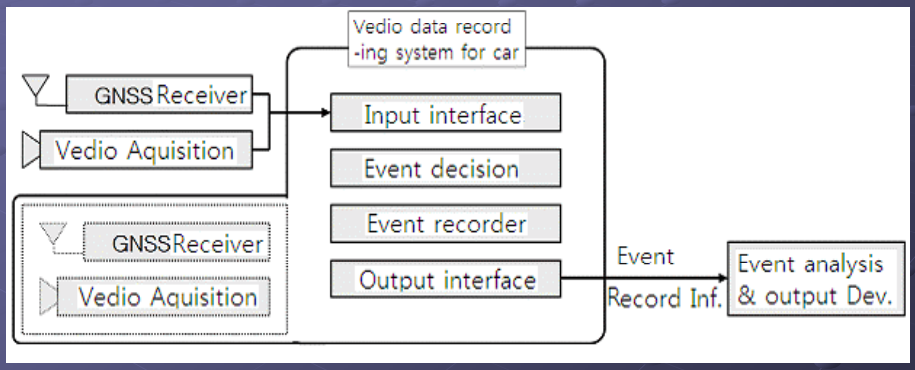
- ❖ Purpose: Prevention and investigation of accidents
- ❖ Relevant market is growing continuously in Korea.


## 3. Background

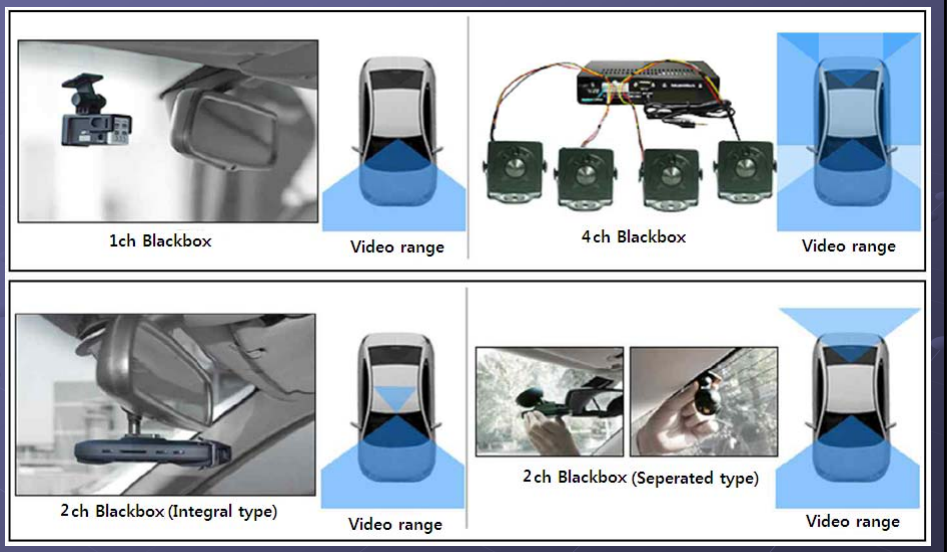
- ❖ With increment in use of Accident Data Recorder(ADR), the quality standards for this device are required as below:
  - Privacy protection
  - Maintaining Video data quality
  - Securing accident data at any conditions, like hot, humid weather, and external pressure, etc.

# 4. Structure

❖ Basic functions of the Video Data Recorder




# 5. Use cases



## 6. Relevant standards at present

- Korean Industrial Standard
  - KS C 5078: Video Data Recorder for road vehicle accidents
- Scope
  - This standard applies to the video data recording system for road vehicle accidents which will be used for recording and generating information from the automobiles' front video data capturing device before and after the accident to investigate and verify the reason in detail.

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## 7. Items to be qualified

- Prevention from complete battery discharge
- Discriminating capability of license plates
- Sustainability of Video camera performance
- Ability and security of data recording
- Mechanical robustness
- Resistance to high/low temperature
- etc.

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