



Product Overview

Driveri™ is an AI-powered vision-based IoT system, sold as an aftermarket product to fleets. The device is installed in trucks/cars behind the rear-view mirror, and the power is supplied from the car battery through a custom power cable.

When the vehicle is being driven, the road-facing camera is enabled by default, records and generates real-time safety alerts to assist the driver. The camera facing the driver/passenger is optional due to privacy requirements and enabled at customers' request. The recorded videos are processed (using our patented machine learning algorithms) on the device together with the other sensor data and can detect any events related to driving behaviour and driver behaviour. The device has 2 buttons on the bottom side of the device, when pressed creates alerts which are user-generated. 2 LEDs on the driver-facing side indicate the current operational state of the device & also indicate privacy settings (driver-facing camera recording status).

Features

- Octacore CPU + GPU / DSP for Edge computing

- Auto-grade ISP with 90+ dB of HDR performance and Full HD imaging
- Full HD Inward /driver facing camera with IR LED for night vision
- Connectivity - WiFi / BT
- 2 LED indicators to represent device state
- Integrated Mic & Speaker for alerts
- 2GB RAM + 64GB ROM, expandable up to 256GB
- Inertial sensors (Accelerometer & Gyro), Thermal sensor

Processor Specifications		
CPU	64-bit ARM® Octa Core	
Video Encoding - H.265	1080p	
Video format	HD Videos for limited time (customizable) Low Resolution videos for long term storage	
Sensors	IMU – Accelerometer + Gyro, Temperature, Ambient Light	
RAM & Storage		
Storage	64GB / 128GB eMMC	
Expandable Storage	Up to 256GB via microSD	
Camera Specifications		
Camera	Outward	Inward
Pixel Size	2.8µm OmniBSI-2 pixel	3µm x 3µm
Dynamic Range	>90dB HDR	72db
Field of View	74° (Horizontal) 57° (Vertical) 90° (Diagonal)	148° (Horizontal) 80° (Vertical) 168° (Diagonal)
Construction	6G – Visible	6G + IR Filter (Dual Band)
Wireless Connectivity & I/O		
Wi-Fi	802.11 b/g/n	

Bluetooth	V5.0
Connectors	USB (with OTG support), Power Jack, microSD
Electrical Specifications	
Input Voltage	7V-17V
Input current (full operation)	12V / 2A
Max Power Consumption	24W
Signals Input – High Voltage (Positive)	+17V
Signals Input – Low Voltage (Negative)	0v
Physical Dimensions	
Length x Width x Height	126mm x 71mm x 65mm
Colour	Black
Case Material	Polycarbonate (PC)
Power Cable Length	3 meters
Power Cable Thickness	4.5mm

OPERATING REQUIREMENTS AND CONDITIONS

The design of Netradyme D-210 complies with U.S. Federal Communications Commission (FCC) guidelines respecting safety levels of radio frequency (RF) exposure for Mobile devices.

RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimetres between the radiator and your body.

FCC PART 15 STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. See 47 CFR Sec. 15.105(b). These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and the receiver.

Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

REGULATORY INFORMATION

Model name: Netradyne D-210

Series Model: D-210A, D-211

FCC ID: 2AM8R-D210 company number 23098

IC : 23098-D210

FCC CAUTION STATEMENT FOR MODIFICATIONS

CAUTION: Any changes or modifications not expressly approved by Netradyne could void the user's authority to operate the equipment.

IC Caution:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

RF exposure statement:

The equipment complies with IC Radiation exposure limit set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Déclaration d'exposition RF:

L'équipement est conforme à la limite d'exposition aux radiations de la IC établie pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

Warning

A vision-based platform designed to enhance driver safety within the commercial vehicle market, Driveri™ focuses on identifying, recognizing, and rewarding positive driver performance. The platform was developed to capture every moment of the driving experience, delivering stronger value to each driver, fleet manager, and a fleet's bottom line. It does not replace the role of the driver nor the functions a driver ordinarily performs. It does not eliminate or decrease the need for a driver to stay alert and to obey all traffic laws while operating a vehicle. Driveri is not an automated driving assistance program and it does not act as a substitute for any aspect of driver vehicle control or safe driving practices. Whether or not the device is in use, it is always the responsibility of the driver to take appropriate corrective action. The driver should never wait for the Driveri program to provide a warning or coaching opportunity before taking measures to avoid an accident. Failure to do so can result in serious personal injury, death, or severe property damage.

While Driveri uses machine vision learning, artificial intelligence, and algorithms, it cannot and does not guarantee 100% accuracy in the detection of street signs, other vehicles, traffic lights, driving lanes, pedestrians, weather conditions, nor in providing warnings of all potential road hazards. Drivers should never solely rely on Driveri, but instead should rely on safe driving practices and maintain control of the vehicle at all times.

Driveri may have limited to no functionality in certain conditions such as inclement weather, low visibility, and certain road conditions. Always keep the cameras and view of the device unobstructed and properly calibrated so as not to inhibit the functionality of Driveri. Driving in certain conditions or any interference with the device can result in false, few, or no alerts.