

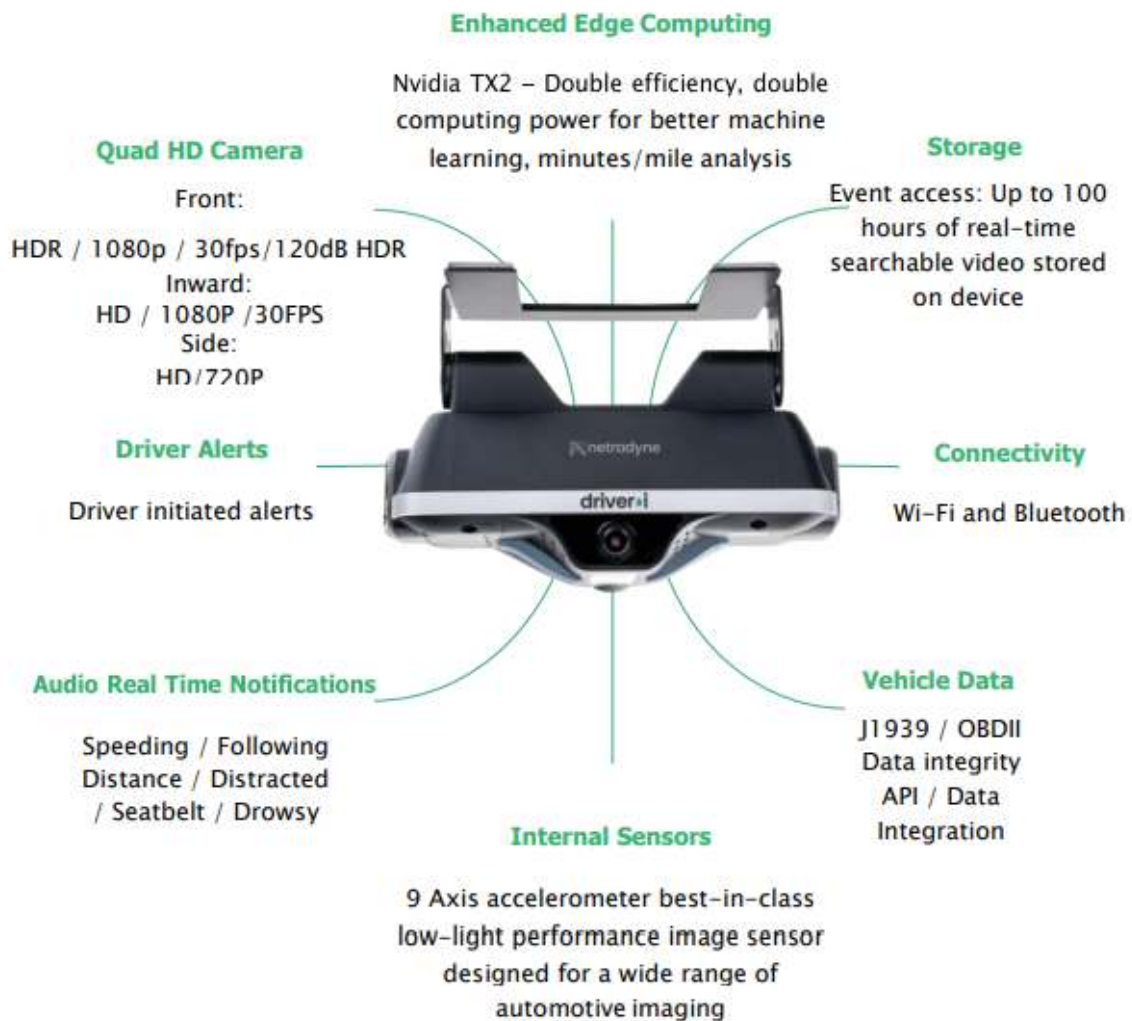
D410 Features and Technical Specifications

help-installation.netradyne.com/hc/en-us/articles/4411063629849-D410-Features-and-Technical-Specifications

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 RJ45 cable. The device is capable to connect with the OBD/J1939 of the vehicle to collect the engine data. This device is passive to the driver.

When the truck is running, the device captures 360° videos where the outward facing camera is the primary recording and other 3 cameras are optionally configured as per the customer requirement. The recorded videos are processed (using our patented machine learning algorithms) on the device together with the other sensory data and can detect any events related to driving behavior and driver behavior.

When an event is detected, an alert together with the supporting processed data is uploaded to the cloud dashboard where the events and related data can be accessed by the fleet manager. The device has 2 buttons on the bottom side of the device, when pressed creates alerts which are user generated. 2 LEDs on driver facing side indicate the current operational state of device.



Features

256 Core GPU

Quad Core ARM A57 CPU with 256 Core GPU with performance up to 1 TFLOPS

- Outward facing camera with 120dB in HDR mode
- Inward facing camera with IR LED for night vision
- Connectivity- LTE / WiFi / BT
- 2 LED indicators to represent device state
- Integrated Mic & Speaker for alerts
- 4GBRAM + 16GB ROM
 - Storage expandable up to 512GB
- Inertial sensor (Accelerometer & Gyro), Thermal sensor

Processor and GPU Specification

GPU	256-core GPU
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CPU	64-bit ARM® Quad Core A57 CPUs
Video Encoding - H.265	1080p @ 30 fps, 720p @ 30 fps
Video format	MP4 with H.265
Sensors	IMU – Accelerometer + Gyro + Compass, Temperature, Ambient Light

RAM and Storage

Memory (RAM)	4 GB LPDDR4 @ 1600MHz
Storage	16GB ROM, expandable up to 512GB

Camera Specification

Camera	Outward	Inward	Right & Left
Pixel Size	2.8µm OmniBSI-2 pixel	3µm x 3µm	3µm x 3µm
Dynamic Range	>90dB dual capture; >120dB in HDR mode	72db (not true HDR)	72db (not true HDR)
Responsivity	~5 V/lux sec	3.3 V/lux sec	3.3 V/lux sec
Lens Size	1 / 2.7"	1 / 4"	1 / 4"
F No.	1.6	2.0	2.0

Camera	Outward	Inward	Right & Left
Field of View	74° (Horizontal) 57° (Vertical) 90° (Diagonal)	148° (Horizontal) 87° (Vertical) 190° (Diagonal)	127° (Horizontal) 82° (Vertical) 143° (Diagonal)
Construction	6G – Visible	6G + 1R Filter - Dual Band Pass	2G2P – Visible with IR Filter

Wireless Connectivity & I/O

LTE Connectivity	4G LTE (Cat 3)
SIM Connector	Yes, micro SIM
Wi-Fi	802.11 ac
Bluetooth	v4.0

Electrical Specifications

Input Voltage	10V-15V
Input current (full operation)	12V / 3A
Max Power Consumption	36W
Signal Input – High Voltage (Pos)	+17V
Signal Input – Low Voltage (Neg)	+7V

Active Mode Power Consumption

Peak Current (A)	2.9A @ 12V
RMS Current (A)	1.5A @12V
Peak Power (W)	34.8W
RMS Power (W)	18W

Periodic Wake-up Mode Power Consumption

Peak Current (A)	1.8A @ 12V
RMS Current (A)	0.77A @ 12V
Peak Power (W)	21.6W
RMS Power (W)	9.24W

Shutdown Mode Power Consumption

Current (A)	4mA @ 12V
Power (W)	48mV
Average Power consumption***	28.7mAh***

Note:

* These values are measured at room temperature of +25°C

** Power Consumption (6 min/ every 3 hours after vehicle shutdown)

*** As per default Periodic wake-up Mode defined in ** with ignition off

Battery Consumption

3 minutes for every 360 minutes	10.3mA
6 minutes for every 180 minutes	28.7mAhh

Wireless Connectivity & I/O

Supported Bands	4G LTE (Cat 3)
SIM Connector	Yes, microSIM
Wi-Fi	802.11 b/g/n/ac
Bluetooth	v4.0

Fuse Recommendations

VBAT Line	8A
Ignition Line	2A

Physical Dimensions

Length x Width x Height	189.9mm x 78.9mm x 118.5mm
Color	Matte Black with MT11010 Finish
Case Material	Polycarbonate (Bayer 2805)
Power Cable Length	3 meters
Power Cable Thickness	6 mm

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