

# VIA Mobile360 Surround View



VIA Mobile360 Surround View delivers real-time in-vehicle 360° video monitoring and recording to provide the most effective solution for driver monitoring, safety and vehicle tracking.

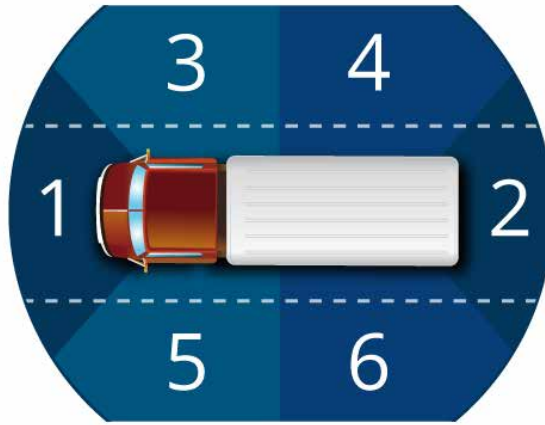
By providing drivers with a comprehensive view of their immediate environment, VIA Mobile360 Surround View helps to prevent accidents caused by blind spots and to improve vehicle maneuverability in dense urban spaces and demanding terrains. With its remote monitoring capabilities, it also enables operators to manage their fleets more efficiently by reducing journey times and delivery turnarounds and minimizing maintenance, repair, and insurance liability costs.

Featuring a robust and versatile system design that has been optimized for the most demanding on-road and off-road conditions, VIA Mobile360 Surround View is an ideal solution for a wide variety of applications, including :

- Freight Transportation & Delivery
- Construction, Industrial, & Mining
- Agriculture & Forestry
- Refuse Collection
- Armored Cars & Secure Freight Shipping
- Buses and Coaches

A wide array of customization options is available to meet specific usage requirements in almost any environment – from crowded city streets and loading docks to remote mines and construction sites.

## VIA Mobile360 Surround View System



With its ruggedized chassis, extended temperature support, and flexible voltage input, the VIA Mobile360 Surround View system has been specifically designed for the rigors of in-vehicle operation. Key features include :

- Integrated 4G modem and GPS for remote wireless tracking and monitoring
- Support for up to six CSI/PoC cameras through six FAKRA connectors
- Real-time encoding for clouds/local storage
- 512GB SSD ( -40° ~ 90° ) local storage
- Optional 7" HD resistive touch screen with VESA mount support
- 5+ years' longevity with vitality support and locked BOM option
- Hardware and software customization options

## VIA Multi-Stitch Technology



VIA Mobile360 Surround View harnesses VIA Multi-Stitch technology to seamlessly combine the camera feeds on the fly and create an encompassing real-time spherical view of a vehicle's surroundings that can be viewed locally or remotely. With its sophisticated 3D imaging algorithms, the technology not only ensures sharp and clear panoramic images but also supports dynamic multidirectional monitoring around the vehicle from an almost unlimited range of easily-configurable perspectives, including birds-eye view, front-view, rear-view, and side-view.

## — VIA Mobile360 E-Track —



VIA Mobile360 Surround View also features VIA Mobile360 E-Track, a cloud portal that enables fleet owners to collect and organize vehicle and driver data for real-time vehicle tracking, event and data recording, and asset management. Customizable event triggers keep managers informed of critical situations so that they can respond immediately, while a user-friendly graphical interface makes analysis of trip reports a breeze. Key features include :

- Real-time route tracking
- Real-time monitoring with event notifications
- Event and data recording
- Individual camera stream and video recording

Enhanced E-Track features can be added through the integration of up to two additional FOV-50 cameras, including :

- Driver monitoring
- Cargo monitoring
- License plate detection

## — VIA Mobile360 ADAS —

Partial ADAS features can be added to VIA Mobile360 Surround View through the integration of two additional automotive-grade FOV-50 cameras. VIA Mobile360 ADAS (Advanced Driver Assistance System) is a road safety-enhancing solution with an intuitive HMI interface that keeps drivers alerted to constantly-changing road variables under a wide array of conditions to make their journey as safe and efficient as possible. Key features include :

- Lane Departure Warning
- Forward Collision Warning
- Blind Spot Detection
- Pedestrian Detection
- Vehicle Detection and Classification
  - Special Vehicles
  - Motorcycle
  - Bicycle
- Speed Limit Detection
- Rear-end Collision Avoidance

# VIA Mobile360 Surround View System Cameras

VIA Mobile360 Surround View is equipped with four automotive-grade FOV-190 cameras. A choice of two additional FOV-190 or FOV-50 cameras can be integrated into the system for Enhanced Surround View, Partial ADAS, and Computer Vision capabilities. Key features of the cameras include:



## FOV-190 Camera

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- Sensor : Sony ISX016 CMOS ( 1.2MP )
- Genlock
- IP69K Certified
- FOV : 190°
- Horizontal Angle : 190.5° Typ.
- Vertical Angle : 160.7° Typ.
- Image Size : 1280 ( H ) x 720 ( V ) @ 30fps
- Operating Temperature : -40°C to 85°C
- Manufacturer : Sharp



## FOV-50 Camera

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- Sensor : OmniVision OV10640 ( 1.3MP )
- IP67 Certified
- FOV : 80°
- Horizontal Angle : 79.2° Typ.
- Vertical Angle : 53.1° Typ.
- Image Size : 1280 ( H ) x 1080 ( V ) @ 30fps
- Operating Temperature : -40°C to 85°C
- Output Formats : LVDS / YUV
- Manufacturer : Sharp

# VIA Mobile360 SurroundView Sample Kit

The VIA Mobile360 Surround View is available in the following base configuration :

Item	Description	Qty	Price
VIA Mobile360 System	Ruggedized VIA Mobile360 System supporting : - Six FAKRA connectors for real-time camera inputs - 512GB SSD ( -40 -90 ) for event storage - 4G modem for remote access	1	US\$ 1,800
FOV-190 Cameras	Sharp 1.2MP FOV-190 automotive-grade camera with Gen-Lock ( Frame Syncing ) for superior image stitching output, including 10M FAKRA cable	4	US\$ 1,300
7" Monitor	7" automotive-grade HD resistive touch monitor for accessing different views or features with VESA mount support	1	US\$ 400
			<b>Total : US\$3,500</b>

## VIA Mobile360 Surround View Sample Kit Expansion Options

The functionality of VIA Mobile360 Surround View can be expanded through the integration of up to two additional automotive-grade FOV-190 or FOV-50 cameras. The following configuration options are available :

### ■ Enhanced Surround View

Up to two additional Sharp 1.2MP FOV-190 automotive-grade cameras with Gen-Lock ( Frame Syncing ) for enhanced 360° capture and stitching capabilities on longer vehicles.

### ■ Partial ADAS

Up to two Sharp 1.3MP FOV-50 automotive-grade cameras for the front/rear or right/left sides of the vehicle.

### ■ Computer Vision

Up to two Sharp 1.3MP FOV-50 automotive-grade cameras to enable enhanced E-Track capabilities such as driver monitoring, cargo monitoring, and license plate recognition.

VIA Mobile360 FOV-190 or FOV-50 cameras to enable these features are available as follows:

Item	Description	Unit Price
FOV-190 Camera	Sharp 1.2MP FOV-190 automotive-grade camera with Gen-Lock ( Frame Syncing ) and 10M FAKRA cable	US\$ 325
FOV-50 Camera	Sharp 1.3MP FOV-50 automotive-grade camera including 10M FAKRA cable	US\$ 500

## VIA Mobile360 Surround View System Calibration

VIA provides full range of calibration services to optimize the installation of the VIA Mobile360 Surround View system and cameras. More information is available upon request.



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