XIRGO

VIDEO TELEMATICS

KP2

PRO INSTALLATION GUIDE

VERSION 8 | LAST UPDATED 3/25/2025

Please read this entire guide and refer to our installation materials before using your KP2.

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KP2

PRO INSTALLATION GUIDE

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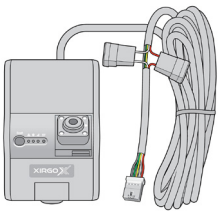
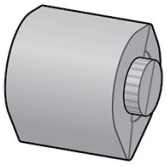
Please read this entire guide before installation and use.

PACKAGE CONTENTS

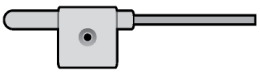
KP2 VEHICLE RECORDER



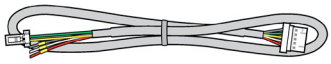
Mounting bracket & attached power cable
(Connects to adapter cables)



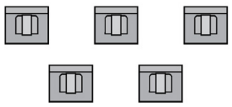
Removable wedge block
(Driver-facing camera ordered separately)



Torx® wrench



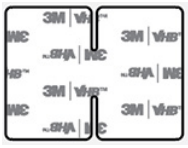
8" 3-wire adapter cable
(Connects to bracket cable)



Square adhesive cable clips (x5)

- **64GB microSD card (pre-installed)**
- **Larger capacities available upon request**

Nano SIM card
(Pre-installed)



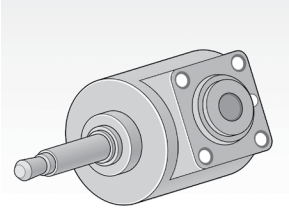
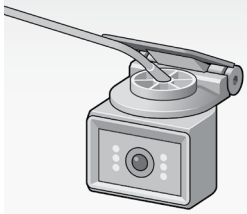
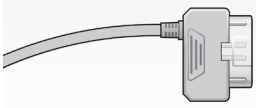
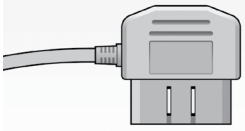
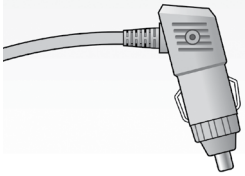
Double-sided 3M™ tape
(One adhered to bracket, one extra piece)

Alcohol prep pad (x2)

OPTIONAL ACCESSORIES

At Xirgo, we give our partners multiple options when selecting their preferred power application and camera configuration. The items mentioned below are compatible with the KP2 and offer different benefits or trade-offs when employed with your device.

For more details on prices and ordering options, please contact your Xirgo Account Manager or email us at **support@xirgo.com**.

ACCESSORY	NAME & DESCRIPTION	USE CASE	BENEFITS
 **Product SKU: KP2-DFC-S**	**Driver-facing camera** **Description:** A modular insert to monitor in-cabin behavior. Plug-and-play functionality. Enhanced visibility is that easy.	• Increased awareness of in-cabin incidents. • Partners prefer full access to current and future DMS features.	• Access to DMS capabilities. • DFC auto-calibrates your driver's head position. • Gain actionable insight into driver negligence for precise driver coaching.
 **Product SKU: KP2-INTCAM-REM**	**KP2 Remote Driver-Facing Camera** **Description:** Replaces the KP2-DFC snap-in camera for interior/driver-facing video — enabling the KP2's driver-facing camera to be moved to ideal vantage points in vehicle cabs independently from the KP2.	• Larger cabs • Unusual installation scenarios • Vehicle interiors blocking standard placement of KP2's driver-facing camera	• Boosts installation flexibility while maintaining support for KP2's driver monitoring features • Includes auto-switching infrared night vision • Cable can be extended
 **Product SKU: KP2-OBDII-DATA**	**OBDII (data) power adapter cable** **Description:** This is a 15-minute self-install that provides most accurate trip detection and vehicle speed data for onboard processing. Also supports connection to JBUS ports with a splitter cable.	• Vehicles with OBDII port access. • Partners prefer vehicle-based speed to inform ADAS calculations. • Self-installation required.	• Gives greater insight into your vehicle's true speed and other valuable data streams. • No professional install required.
 **Product SKU: KP2-OBD-PWR**	**OBDII (without speed & RPM) power adapter cable** **Description:** Like the OBDII (CAN) adapter, this 15-minute self-install uses your vehicle's OBD port to apply power to your KP2. Save money with quicker self-installation and a cheaper power supply method.	• Vehicles with OBDII port access. • Self-installation required. • Cheap power application and self-install are of greater need than CAN-enabled features.	• You still receive DMS features with a DFC. • Lower price than the OBDII (DATA) cable. • No professional install required. • Maintain access to ADAS functions through GPS-based speed.
 **Product SKU: KP2-CIG-PWR**	**Cigar power adapter cable** **Description:** Move your KP2 around from vehicle to vehicle without professional installation. Common female cig port required. An easily transferable and deployable installation solution.	• Temporary vehicles. • Rental vehicles. • Vehicles with hard install prohibited. • Vehicle Testing. Test many vehicles in a short period. • Self-installation required.	• Applicable to different types of vehicles. • No professional install required. • Maintain access to ADAS functions through GPS-based speed.

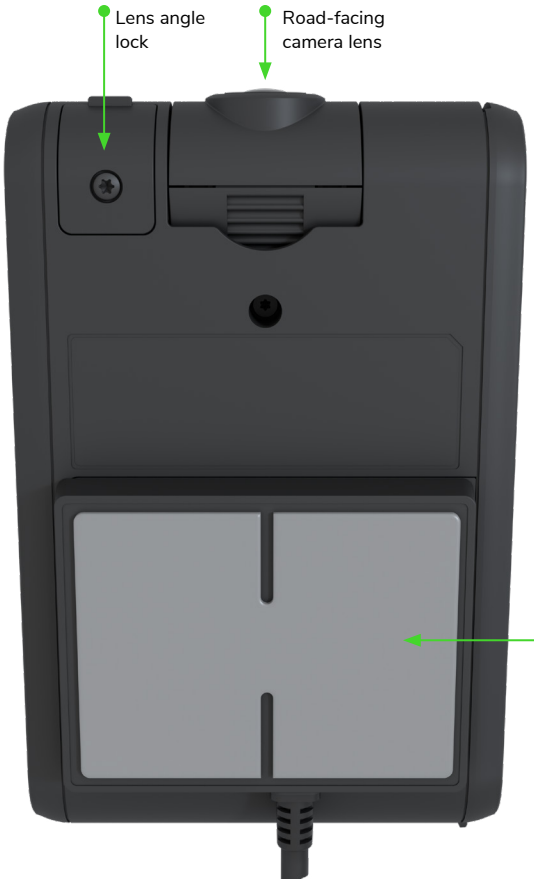
KP2 FEATURE REFERENCE

FRONT

SIDE COVER OPEN

KP2 FEATURE REFERENCE

BACK



SIDE

Unscrew the right-side bracket. Remove the KP2 from the bracket to adjust camera angle or insert/remove SIM/micro SD card.

Applied screws for design purpose only.

HOW TO INSTALL YOUR KP2

Prepare your KP2

DISCLAIMER

The KP2 installation featured in this guide is designed for professional installation. Xirgo assumes installers possess knowledge of current, generally accepted industry installation standards and practices. The process outlined in this document accounts for driver positioning on the left side of the vehicle. Please adjust the installation accordingly if you're working with driver positioning on the vehicle's right side or other locations.

1. Use the Torx wrench provided in the package contents to open the side cover of the device. You'll notice that both the microSD and SIM cards come pre-installed. See **Diagram A**.
2. Keep the side panel open. It allows you to remove the KP2 from its mount and adjust the driver- and road-facing cameras. Prep the cameras for adjustments.
   - Loosen the KP2's lens angle lock screw (for the road-facing lens) with the Torx wrench.
   - If installing a driver/interior facing camera, press the tab next to the wedge block, and remove it.
   - If using the KP2-DFC-S driver-facing camera, snap it into the KP2.
   - If using the KP2-INTCAM-REM interior camera, snap the connector end the into KP2.

   Note: You must order the KP2's driver-facing camera as a separate accessory.

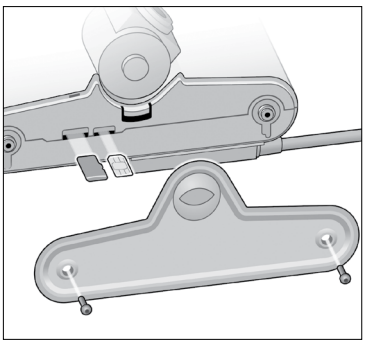


Diagram A

3. Go to the target installation vehicle, and hold the KP2 where you'll mount the bracket. The device should reside close to the windshield's center to reduce the rear-view mirror's blind-spot footprint, and the driver-facing camera should be positioned on the driver's side of the vehicle. See **Diagram B** for reference.

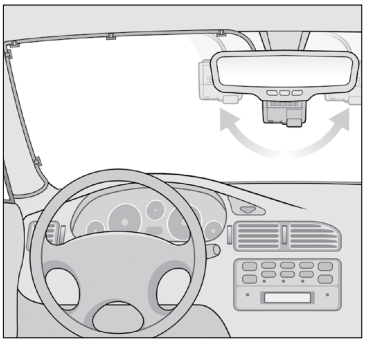


Diagram B

   The KP2 driver-facing camera placement must be level with or slightly above the driver's eyes and nose, with a clear view of the driver and minimal physical or visual obstructions. Reduce the possibility of tampering with the KP2's DMS capabilities by ensuring obstructions (e.g., the rear-view mirror) do not block the camera lens.

   The distance between the driver-facing camera lens and the driver's head should be between 30 and 90 cm, where possible. Head position at further distances lessens the KP2's ability to detect driver facial features. This significantly impacts event detection. Clear and distinct visibility of the driver is paramount to DMS accuracy.

   Note: Installers must consider variable positions of the driver's seat and the rear-view mirror to ensure driver adjustments do not affect the camera's view.

4. While holding the KP2 in place, rotate each camera until they're at the desired angle.
5. Remove the protective decals from each lens.
6. Use the Torx wrench to tighten the top screw on the KP2 and lock the road-facing camera's position.

Once you've secured the road-facing camera, proceed to Attach your camera to the windshield.

HOW TO INSTALL YOUR KP2

Attach your camera to the windshield

Your vehicle's windshield temperature shouldn't be too hot or cold. Xirgo recommends installing your KP2 in moderate temperatures (50° F~80° F /10°~27° C). If in severe cold weather, use the vehicle defrosters to warm the windshield.

Ensure your windshield is dry and has no chips or cracks before installation.
If the windshield is compromised, device application may cause chips or cracks to spread.

1. Clean the windshield with your alcohol wipe. See **Diagram C**. Allow time to dry.
2. Remove any film left over from the solution.
3. Remove the plastic from the tape on the mounting bracket.
4. When attaching the KP2 to the windshield, position the bracket so it's flush with the windshield.
   Note: Ensure your device placement abides by current FMCSA mandates (if applicable) for your type of vehicle.
5. Apply your KP2 to the windshield, and maintain pressure for at least 30 seconds.
6. After mounting your KP2, use the Torx wrench to re-attach the device's side cover. If present, this will lock the driver-facing camera in place.
7. Go outside the vehicle and confirm 80%–90% of the tape's surface area connects with the glass. Momentarily apply pressure where the camera doesn't connect to the glass (if necessary).

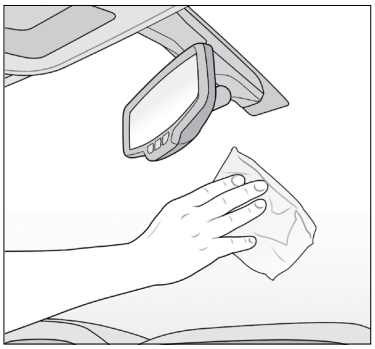
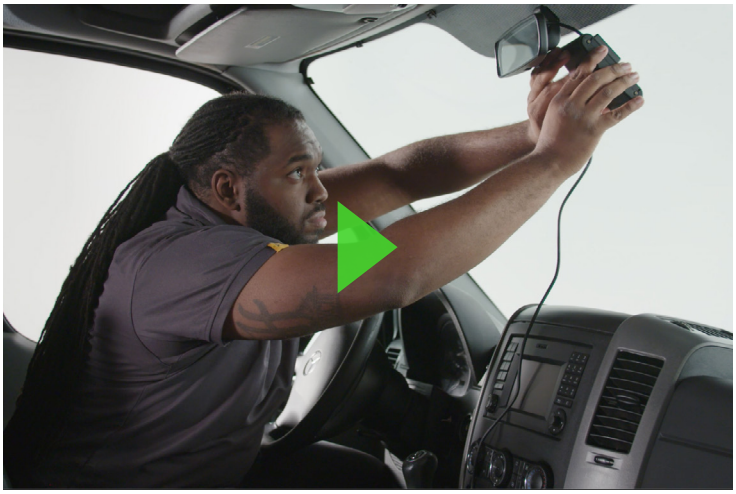


Diagram C

Once the device is correctly attached to the windshield, continue to Connect the KP2 to your vehicle's power source.



Watch
KP2 Installation Video

HOW TO INSTALL YOUR KP2

Connect the KP2 to your vehicle's power source

Steps below describe the process for hardwiring the KP2 to a vehicle's wiring, also known as three-wire installation. For installation using vehicle data bus ports (OBDII/J1939) see the KP2 User Guide.

If you are not a professional technician, email **support@xirgo.com** to request installation from an approved Xirgo installer. By continuing this process without a certified installer, you accept the ramifications of tampering with your vehicle's power wiring.

1. Turn off your vehicle.
2. Take your main power cable and place it where it'll reside alongside the vehicle's headliner and A-pillar. This shows you where to route the cable and how much slack to leave to connect the adapter cable to the vehicle's power source.
3. Clean the space where the cable clips will reside with an alcohol wipe. Allow time to dry.
4. Once the windshield is dry, attach clips where you'll place the cable. Ensure the clips are evenly spaced. Keep the opening of the clips facing upwards and ensure the cable remains taut.
5. Slide the power cable from the bracket into the clips. Your cable should look like **Diagram D**.
6. Route the power cable around the side and behind interior panels or weather stripping to secure it. See **Diagram E**. The cable should fall near the driver-side footwell.
7. Attach the KP2 main power cable to the included 3-wire cable. Disregard the black connector at the exposed end of the 3-wire adapter. See **Diagram F**.
8. Identify each connection wire on the 3-wire adapter: black, white and red.
   Note: Ensure your 3-wire connection has fuses attached to the red and white wires within 4" of the power source. This is a requirement that protects both your device and your vehicle.
9. Connect each wire to its associated signal.
   - **Black** — ground or battery (-)
   - **White** — true ignition or ACC
   - **Red** — power or battery (+)

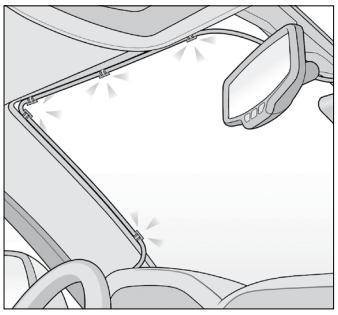


Diagram D

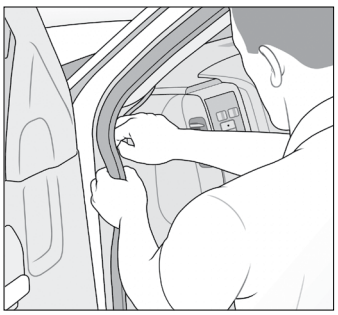


Diagram E

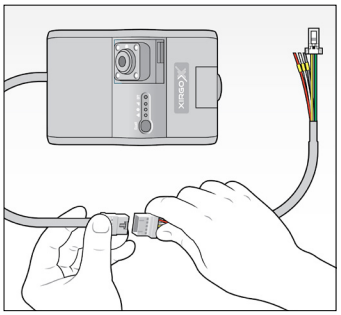


Diagram F

Go to How to test your installation to ensure you've properly applied power to your device.

CAUTION

A firmware upgrade may have been queued in SmartAPI prior to your KP2's installation. This means that shortly after first powering up, KP2 will download and install new firmware, a process that may take several minutes. If a firmware upgrade occurs, you'll see the Blue and Green LEDs blink on and off, then the device will reboot.

HOW TO TEST YOUR INSTALLATION

After installing the KP2 in your vehicle, test whether it is operational.

1. Turn on your vehicle. Your camera should power on.
2. You'll see a **Red**/**Blue**/**Green** light sequence during your camera's boot-up process (see LED reference table).
3. After your camera completes the boot-up process, check for a solid **Blue** light. This indicates proper operation and recording.
4. Check for a **Green** light that remains on, indicating connectivity.
5. Watch for a **Blue** light. After 5 minutes, if both the **Green** and **Blue** lights don't remain on, an error has occurred. See **Diagram G**.

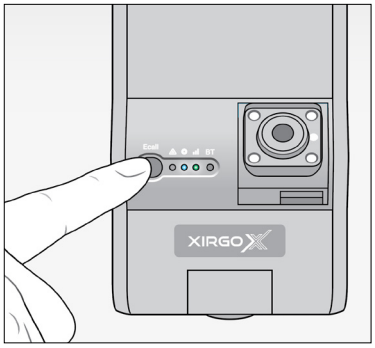


Diagram G

Troubleshooting error scenarios

If your KP2 has:

- Solid **Red**, **Blue** and **Green** lights, then a camera isn't receiving a video signal. Check your camera's connection.
- A solid **Blue** light, but the **Green** light is blinking or is off, then clean and correctly reinsert your SIM card.
  – If the **Green** light still blinks, this is a configuration or server issue that requires **support@xirgo.com**.
- A **Red** blinking light, then there is an SD card error or corruption. Contact your partner or **support@xirgo.com** to repair or replace your SD card.
- A solid **Red** light, then your device isn't receiving acceptable power from the host vehicle. Check the output of your power source or your ground (black wire) connection.

If your KP2 install is operational, please move on to How to calibrate your G-sensor.

HOW TO CALIBRATE YOUR G-SENSOR

Park your vehicle on a flat surface for calibration. Ensure vehicle remains parked on a flat surface for both G-sensor and device settings calibration.

After your camera boots up, press the G-sensor calibration button. This is the small **Black** button to the right of the e-call/panic button. You'll hear a beep. Some devices running on newer firmwares may not provide an audible alert.

The KP2 LED light will blink briefly to indicate that the G-sensor calibration has registered.

You've completed the first steps of your KP2 calibration. To adjust your settings, continue to How to configure KP2 settings.

HOW TO CONFIGURE KP2 SETTINGS

To finalize your installation and onboard your device, scan the QR code. Download and open the app. Scan your device's IMEI label, and follow the walk-through featured below.

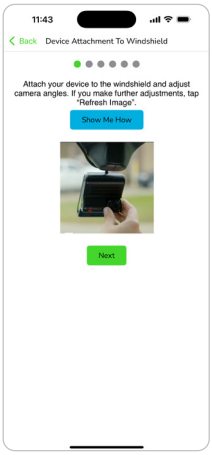
Access the KP2 Installation App

Download on the App Store

GET IT ON Google Play

1. Launch the app and scan the green barcode to get started.

2. Ensure the IMEI from the scan matches your device's IMEI. Tap **Yes** to continue.



3. Mounting the device for optimal view of Road and Driver is essential. If you need additional assistance, please click **Show Me How** for a brief video tutorial.

4. Select your KP2 configuration (Road vs. Road & Driver), and then choose the driver's side of the vehicle.

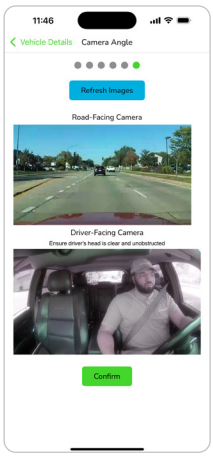
5. Tap **Next** to select your power connection type.

6. Select the power adapter cable you used during installation.

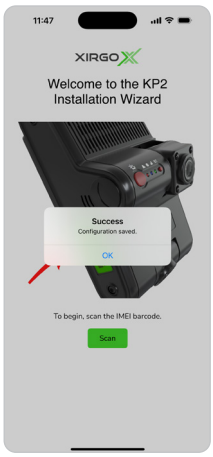
7. To set the "camera height" (from ground), select the picture that is most similar to the vehicle type you are installing KP2 onto. If you prefer to enter a more precise measurement, please choose the Custom option.

8. Complete the data entry for basic vehicle info, and include the addition tracking device ID if one is present.

9. Ensure the VIN is entered correctly. Tap **Confirm** to continue.



10. Review the field-of-view and angle of the Road and Driver cameras. Make physical adjustments as necessary. Tap **Confirm** to continue.



11. Completion of the install and settings adjustments will result in a "Success" message back on the home screen. Tap OK and the app is ready to scan the next KP2.

COMPLETE YOUR INSTALLATION/SUPPORT

You've finished your KP2 installation and device calibration.
Your KP2 is ready to go.

If you have any complications during the installation process or have any questions, please contact our support team at **support@xirgo.com** or call us.

NORTH AMERICA, SOUTH AMERICA, APAC

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EMEA

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NOT AN INSTALLER?

Once you complete the training (about a 30-minute webinar), Xirgo will provide you with login credentials for the SmartOPS portal.

LED & BUZZER SPECIFICATIONS

Status/Step			LED			Sound
			Warning	Record	Communication	
			Red	Blue	Green	
Startup & power off	Booting step 1		On	Off	Off	-
	Booting step 2		On	On and off	Off	-
	Booting step 3		On	On	On and off	-
	Booting finished		On	On	On	-
	Power off		Off	Fast simultaneous on and off		Beep no. 2
	Power off/finished		Off	Off	Off	-
Record	Continuous record	Recording	-	On	-	-
	Event record	Standby	-	On	-	-
		Recording	-	Fast on and off	-	-
	Dual record	Continuous recording	-	On	-	-
		Event recording	-	Fast on and off	-	-
	No record	No recording	-	Off	-	-
Communication	4G LTE network device ready		-	-	On	-
	Communication		-	-	On	-
Function	SD format		Off	Sequence on and off		Continuously beep no. 2
	G-sensor calibration		-	-	-	Beep no. 2
	FW upgrade		-	Double sequence on and off		-
Warning	System warning	SD card full	Fast on and off	Off	-	Beep no. 3
		Video loss	On	-	-	-
Error	Record error	SD error, no SD, write fail	Slow on and off	Off	-	Beep no. 3
	Communication error	4G LTE network device error, SIM error	-	-	Off	-
		Data network connection error			Slow on and off	
		DMS communication error			Slow on and off	
Event trigger	G-sensor, panic button, alarm-in		-	-	-	Beep no. 1
	Over speed		-	-	-	Beep no. 4 (2 times)
ADAS	Lane Departure Warning (LDW), Forward Collision Warning (FCW), Headway Monitoring Warning/ Tailgating (HMW), Pedestrian Detection (PD)		-	-	-	Warning beep or voice
DMS	Driver Fatigue Warning (DFW), Driver Distraction Warning (DDW), Phone at Ear Detection (PED)		-	-	-	Warning beep or voice

TECHNICAL SPECIFICATIONS

MECHANICAL	
Dimensions	82mm W x 126mm H x 64mm D/3.2" W x 5.0" H x 2.5" D
Weight	232.4 g (including 2nd camera, excluding power cable)
Image Sensor	2 Megapixel CMOS Sensor
Angle of View	Main, Road-Facing Camera (forward-facing): 140° (115°(H), 60°(V)) Optional Driver-Facing Camera: 130° (104°(H) x 56°(V))
ELECTRICAL	
Power Input	DC 12V/24V, 1.5A
Power Consumption	4W (6W with ADAS and DMS enabled)
Delayed Power Shutdown	Supports Delayed Power Shutdown and Automated Wake-Up Feature (selectable intervals)
Supercapacitor	Enables Recording of Last File and Safe Shutdown (selectable intervals)
PC Software	MSM8953, Octa-Core ARM Cortex-A53
Video Resolution	Main Camera: 1080p (1920x1080), 720p (1280x720) 2nd Camera: 1080p (1920x1080), 720p (1280x720)
Recording Speed	60 FPS (30 FPS per channel)
Recording Mode	Continuous, Event, Dual Mode
Memory	16GB eMMC+2GB LPDDR3, 64GB MicroSD Card Included. Supports up to 256GB (FAT32)
LED	3 (red, blue, green LED)
ENVIRONMENTAL	
Operational Temperature	-10° C~+55° C
Storage Temperature	-20° C~+70° C
COMMUNICATIONS	
Connectivity	4G/LTE (CAT 6)
Wireless	LTE CAT6 (NA): B2/B4/B5/B7/B12/B13/B14/B17/B25/B26/B41/B66/B71 3G Bands: B2, B4, B5
	LTE CAT6 (GB): B1/B2/B3/B4/B5/B7/B8/B20/B28/B38/B40/B41 3G Bands: B1, B2, B4, B5, B8
	Wi-Fi: 2.4/5GHz, 802.11a/b/g/n/ac Bluetooth: 4.2 BLE
Speaker	Audible Alerts for Events and Audio for ADAS and DMS. Natural Language or Beep Sounds (selectable)
Audio	Internal Microphone
ADAS Event Types	Headway Monitoring Warning (tailgating) Forward Collision Warning Lane Departure Warning
DMS Event Types	Fatigue Distraction
POSITIONING	
GNSS	GPS/GLONASS
G-sensor	Internal 3-Axis G-sensor
Gyro	3 Axis (X,Y,Z), Output Rate: 100 Hz
Time	GPS Time Sync + Built-In Real-Time Clock (RTC)
COMPLIANCE	
Certification/Regulatory	FCC, AT&T, Verizon, CE, E-Mark, UKCA, IC, PTCRB, RCM, FirstNet, RoHS
Warranty	2-Years Standard

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