

QUIN SENSOR AND ABUS QUIN RIDE APP

ABUS Quin helmets are equipped with the Quin Sensor, a fully integrated multi-sensor chip that brings you up-to-speed with modern safety essentials. The “Q” stands for “Quintessential Safety”, and the commitment we share to bringing the most essential and useful innovations to cyclists.

The Quin Sensor equipped on your ABUS helmet is a patented device containing sensors designed to measure forces which typically occur during a bicycle crash. It works by measuring and interpreting unique characteristics of these forces. **Once a potential crash is detected, the sensor communicates with your smartphone to set off an alert and use the phone's data connection to notify your designated emergency contacts.**

Just like your helmet will not protect against every injury possible in all types of accidents, the Quin Sensor has its own limitations. Every accident is different, and it is impossible to predict every stock accident scenario. This means Quin Sensor may be triggered when you are not involved in any actual crash or may not be triggered during certain accidents where the measured forces do not reach the established minimum characteristics. The same may apply if you damage the sensor or your phone has crashed. Based on our research and testing, however, we believe you are better off with a Quin Sensor enabled one than without one.

The ABUS Quin Ride App is the bridge between helmet and user. The app allows you to select your emergency contacts, access custom location tracking features, cancel alerts, and more. The app is also responsible for the Quin Sensor's double-authentication protocol and for computing of ride data integral in detecting risk factors of a crash event.

 No protective headgear technology can protect the helmet wearer against all possible impacts, and serious injury or death could occur while wearing this helmet.



Your Quin Sensor device is not a medical diagnostic tool to determine whether you suffered a head injury nor is it a tool to determine whether your helmet is fit for continued use after a crash. Quin Sensor is not preventative of injuries in any way and is not a substitute for riding safely and responsibly, including riding with others.

QUIN SENSOR ON YOUR ABUS HELMET

The Quin Sensor is finely tuned to perform optimally with respect to its position on the helmet. For Quin Sensor to work as intended, the Quin Sensor-equipped helmet must be worn during the ride. For optimal accuracy and just like with any helmet, the fit system must be adjusted properly against the head, the buckle positioned under the chin, back against the throat, and the helmet must not be worn loosely. Refer to your bicycle helmet owner's manual for proper fit instructions

CONNECT THE QUIN SENSOR

The Quin Sensor will come prefitted into your ABUS helmet. Your helmet and phone connect via low-energy Bluetooth®. This battery-conserving connection ensures your Quin Sensor and phone make optimum use of each charge.

PREMIUM MEMBERSHIP

To take advantage of the full functionality of your Quin Sensor enabled helmet, you need a Premium membership. **An initial subscription is included with your helmet purchase. The same membership profile can be used to work with the entire range of the Quin Sensor equipped helmets.**

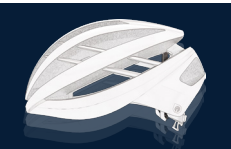
DOWNLOAD THE ABUS QUIN RIDE APP

Please scan the QR code displayed below on this page. You can also find it on www.abus.com/quinapp, the Apple App Store (iOS) or Google Play (Android). You need at least iOS 13 (for iPhone only) or Android 5 Lollipop (build no. 21). Once downloaded, follow the instructions in the ABUS Quin Ride App to pair the Quin Sensor enabled helmet with your smartphone. Pairing needs to be done separately for each Quin Sensor-equipped helmet. The app will confirm when pairing is successfully completed.



Scan the QR code to download the ABUS Quin Ride App from Apple App store / Google Play store.

PAIRING YOUR HELMET



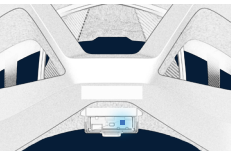
RAISE TO WAKE

The ABUS Quin helmet does not have an on/off switch. Instead, the helmet automatically turns on with a raise-to-wake function. Just pick up your helmet and give it a gentle shake to wake it.

PAIRING MODE/ON

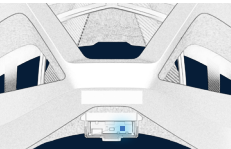
Color : **Blue**

Feedback : Blinks continuously



Open ABUS Quin Ride App

Please follow the instructions on the mobile app to complete the pairing. Visit www.abus.com/quinapp or **scan the QR code to download the app.**



CONNECTION CONFIRMED

Glows for 1 second, followed by blink interval indicating charge status.

Color : **Blue**

Feedback : Glows for 1 sec.

QUIN SENSOR BASICS

The Quin Sensor is designed to reach out for assistance when you need it the most, and has two distinct protocols that can trigger a call for help through the use of your smartphone. Your designated contact(s) can then in turn notify emergency personnel, if necessary.

- If Quin Sensor detects forces potentially indicating a crash requiring assistance: An emergency countdown will be triggered automatically, and the LED light on the sensor will rapidly flash red. Unless turned off manually, a notification will be sent to your designated emergency contact(s) at the expiration of the countdown.
- If Quin Sensor detects forces potentially indicating only a minor crash not necessarily requiring notification of your emergency contact(s): The app will record the impact in your log, so that you have better visibility on and can make more informed decisions regarding the life cycle and replacement of your helmet.
- To trigger the SOS Beacon tap your helmet 4 times (4xtap). If you do not deactivate the alert before the countdown ends, the app will send your emergency contacts an alert with a link to your location. Contacts who have the app will be able to track your LIVE LOCATION and/or navigate to your location.

Other functionalities accessible through the app include ride quality and advanced safety and analytics features. For best performance results of your Quin Sensor system, the various features in the app should be used simultaneously. For all up-to-date functionality, please refer to your **ABUS Quin Ride App and in app membership.**

Remember, your ABUS Quin helmet works hand-in-hand with your smartphone and the ABUS Quin Ride App. For your device to work properly, all of the following is required during a ride:

- You must have the ABUS Quin Ride App downloaded and installed on a compatible smartphone and paired with your ABUS Quin helmet.
- You must keep your phone with you during your ride. The **ABUS Quin Ride** App uses GPS to determine your location and requires an active data connection to send out notifications to your designated emergency contacts and transmit and record location updates. Notifications are not sent and your current location is not updated if you do not have an active data connection. Make sure cellular data is enabled on your smartphone and refer to your phone provider's instructions on how to check whether you have an active data connection.
- The contact information for your designated emergency contacts needs to be up-to-date. To work, your phone must be connected to a cellular signal and your emergency contacts' phones must also be connected to a cellular signal in order to receive notifications by text and/or email. An active data connection is required to receive ride notifications and view your location on a map.
- Prior to each ride, ensure that both your ABUS Quin helmet and phone are sufficiently charged. Pay attention to any low battery warning on your ABUS Quin helmet (LED light on the sensor flashes red). You can also view the battery status of the ABUS Quin helmet by double tapping your helmet. The low battery warning of the Quin Sensor means you have approximately five (5) hours of usage time left.

NEVER RIDE ALONE
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WARNINGS!



If the helmet is not properly fit in accordance with the instructions included in the accompanying bicycle helmet owner's manual, Quin Sensor may not work as intended. If you do not have the bicycle helmet owner's manual, you can obtain it at no cost from your Authorized ABUS Retailer or by contacting ABUS at www.abus.com



Quin Sensor is only designed and tested for use on the ABUS helmet for which it was intended, in the location in which it was installed. Do not modify or remove the sensor in any way. Any tampering with the sensor may result in it not working as intended.



In the event of any impact or blow, do not continue to use this helmet as the structural integrity of the shell or Quin Sensor may have been compromised. In such cases, it is advised to return the helmet to ABUS for inspection and/or replacement.



Batteries and chargers must not be disposed of in your household trash! All batteries and chargers must be disposed of in an environmentally friendly manner, in accordance with the battery disposal regulations in your country or state.



Safety needs to evolve and change with each rider, and Quin endeavors to be there for you in any impactful scenarios. New features related to advanced safety and analytics are in constant development. For all up-to-date functionality, please refer to your ABUS Quin Ride App and subscribe to membership tier that best suits you.

DO NOTS



Do not try to remove the device from the helmet. Any tampering with the Quin Sensor unit may result in damage to the helmet and/or Quin Sensor; and may result in failure to operate as intended.



Do not hit, drop or otherwise generate impact to your helmet to "test" the crash protocol. This could damage the helmet and Quin Sensor and make protection ineffective.



Do not attempt FOTA (Firmware Over the Air) on Low Battery.



Do not try to use a non-compatible charger.



Do not place on or near a direct heat source.

FAQ

Do I need to have the ABUS Quin Ride App for the Quin Sensor to work?

Yes. The ABUS Quin Ride App is the bridge between helmet and user. The app allows you to select your emergency contacts, access custom location tracking features, cancel alerts, and more. The ABUS Quin Ride App is also responsible for the Quin Sensor's double-authentication protocol and computing of data which is integral in detecting the risk factors of a crash event.

Does the ABUS Quin Ride App need to be running for the Quin Sensor to trigger alerts?

Yes. It must be running in the background for the duration of your ride for all the safety functionalities to work.

How does the Quin Sensor compare to other Crash Detection devices and services?

The Quin Sensor is the only fully integrated crash detection and notification system available across multiple helmet verticals. It is designed to keep you safe in any style of ride, whether road-cycling, down-hill mountainbiking, motorcycling... etc.

Uniquely, the Quin Sensor puts the power in the user's hands by allowing users to manually trigger the SOS Beacon and provide their live location for events when help is needed on-the-move.

Does my smartphone have to be with me at all times?

Yes. The Quin Sensor will not work without being connected to the ABUS Quin Ride App on your phone.

Is a data connection required for complete functionality?

Yes. You need an active data connection in order to start a session, to send notifications to your designated emergency contact(s) and/or update your current location.

What happens if I crash and I do not have an active data connection?

Even if the sensor is triggered, without an active data connection, the app cannot send out any notification. The same may happen if you damage your phone during a crash.

What should I do if I know I will be riding outside of data coverage?

You should always ride safely and responsibly, which includes riding with others and in areas where you have cell phone service. If you cannot avoid riding in an area without data coverage, you should notify your designated emergency contacts before you start your ride.

Do I need an active ABUS Quin Ride App premium membership subscription for notifications and alerts to be sent?

No, you do not require a premium membership for emergency alerts to be sent. However, advanced safety and analytics features require a subscription to the premium tier.

How are emergency alerts sent?

Unlimited emergency alerts are sent via push notifications through the ABUS Quin Ride App. Additionally, members of "Essential" tier and above also receive emergency alerts via SMS and Email.

Can Quin Sensor be removed from the helmet?

Do not modify or remove the sensor in any way. Any tampering with the sensor may result in it not working as intended.

Can Quin Sensor be replaced if it is damaged or broken off?

Yes, if done properly by the manufacturer. Please see your Authorized ABUS Quin Retailer for additional information, or contact us on www.abus.com

REGULATORY STATEMENTS

FCC 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.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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. 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 receiver.
- Connect the equipment into 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.

RF Warning Statement: The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

RoHS: ABUS certifies that this product and its packaging are in compliance with European Union Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronics Equipment, commonly known as RoHS.

CERTIFICATIONS



Safety EN 62368-1



Health EN 62479:2010 (MPE)



ROHS



EMC ETSI EN 304
489-1 V2.2.2 / V3.2.0



Radio measurement v EN
300 328 V2.1.1



UN38.3
Passed



FCC integration
measurement §15.247



FCC measurement
Part 15B



Blue light hazard
photobiology



MSDS



Water Resistance



Recycle



Non Disposable

SPECIFICATIONS

Bluetooth Version	5.0 (4.2 ported)
Connectivity Range	50 meters in ideal conditions (20 meters guaranteed)
Battery Type	Rechargeable Lithium Battery
Battery Life	Up to 30 Days (Depending on user behavior)
Charging Time	Up to 4 hours
Update Features	FOTA (Firmware Update Over The Air)
Supported Platforms	iOS and Android
Water Resistance	Above IP67 (Up to 1m of water for 30 mins)



Smart About Safety



Sensor™ User Manual