



Safety Advice (EN)

ES132.1

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Safety Advice

Refer to the following safety instructions and the technical documentation available to download from the ETAS website <u>www.etas.-</u> <u>com</u>. Keep the information provided in a safe place.

Failure to comply with the safety instructions may lead to the risk of damage to life and limb or property. The ETAS Group and its representatives shall not be liable for any damage or injury caused by improper operation or use of the product.

Only use the product if you have read and understood the information concerning safe operation and have the required qualifications and training for this product. If you have questions about safe operation, contact ETAS:

- Technical Support: <u>www.etas.com/hotlines</u>
- ETAS contact partners by region: <u>www.etas.com/contact</u>

The product is only approved for the applications described in the technical documentation. When using and operating this product, all applicable regulations and laws must be observed.

ETAS products made available as beta versions or prototypes of firmware, hardware and/or software are to be used exclusively for testing and evaluation purposes. These products may not have sufficient technical documentation and not fulfill all requirements regarding quality and accuracy for market-released series products. The product performance may therefore differ from the product description. Only use the product under controlled testing and evaluation conditions. Do not use data and results from beta versions without prior and separate verification and validation and do not share them with third parties. Before starting up the product, check whether there is a Known Issue Report (KIR) for that product version: <u>www.etas.com/kir</u> (password: KETASIR). Note the information given in the report.

Program codes or program control sequences that are created or changed via ETAS products, as well as all types of data obtained through the use of ETAS products, must be checked for their reliability and suitability prior to use or distribution. Only use these codes or sequences in public areas (e.g., in road traffic) if you have ensured that the application and product settings are safe through testing in selfcontained and designated testing environments and circuits. This ETAS product allows you to influence safety-relevant systems or data (e.g. in motor vehicles, vehicle components and test benches). In the event of a malfunction or a hazardous situation, it must be possible to put the system into a safe state (e.g., emergency stop or emergency operation).

Intended Use

The product was developed and approved for applications in the automotive sector. Only operate the product as per its specifications. If the product is used in any other way, product safety is no longer ensured. The interface modules are designed for the following applications:

- Detecting signals from ETK and ECU interfaces, as well as from vehicle buses
- Flash programming of ECUs

Application areas

- The product is approved for use in the following areas:
 - Interior
 - Passenger cell
 - Trunk
- Do not operate the product in a wet or damp environment.
- Do not operate the product in potentially explosive atmospheres.

Technical Condition

The product is designed in accordance with state-of-the-art technology. Only operate the product and its accessories if they are in perfect working order. Shut down a damaged product immediately. Do not open or alter the product. Only ETAS may make changes to the product.

Assembly

Only install, connect, disconnect, and cable ETAS products and components when they are de-energized.

Installation Location

Install the product on a smooth, level and firm surface.

NOTICE

Damage to the electronics due to potential equalization

The cables' shield may be connected to the housing, the ground or the ground for the product's power supply. If there are different ground potentials in the test setup, equalizing currents can flow between the products via the cables' shield.

Take account of different electric potentials in your test setup and take appropriate measures to prevent equalizing currents.

Securing the Product

The housing must not be damaged while securing the product.

Risk of injury due to inadequate fastening

- Secure the product so that it does not move uncontrollably.
- Only use carrier systems and fastening materials that can accommodate the static and dynamic forces of the product and are suitable for the ambient conditions.

Ventilation

- Protect the product against direct solar radiation and other sources of heat.
- Ensure that there is sufficient air circulation for efficient heat exchange.

Operation

Only operate the product with the latest firmware. You can find information about updating the firmware in the user manual.

If the firmware update is not completed successfully, try it again. If a new firmware update is not possible and the product is not functional, send the product to ETAS.

Risk due to undefined vehicle behavior during an ECU reset

If you operate the product in combination with ETKs, the ECU must not be reset in an uncontrolled manner.

• Only make changes when the vehicle is stationary (e.g., changes to the test setup, changes to the ETK configuration, software updates).

Electrical Connection

Electrical Safety and Power Supply

- Only connect the product to electric circuits with safety extra-low voltage in accordance with IEC 61140 (devices of class III) within the voltage limits for accessible parts as per IEC 61010-1.
- Comply with the connection and setting values (see chapter <u>Tech-nical Data</u>).

- The power supply for the product must be safely disconnected from the mains power. For example, use a car battery or a suitable lab power supply.
- Only use lab power supplies with dual protection for the supply network (with double/reinforced insulation (DI/RI)).
- The power supply must be suitable for use according to the ambient conditions for the product.
- It is possible to discharge the vehicle battery in regular operation and long standby operation.
- Central load-dump protection is required for operation.

Connection to the power supply

The product is powered via an ETAS module in the test setup.

De-energizing the product

- 1. Disconnect the product from the power supply in one of the following ways:
 - Switch off the laboratory power supply for the test setup.

Disconnect the test setup's connection to the vehicle battery.

 Disconnect the product from the ETAS module supplying the power.

2. Disconnect the product from all interfaces.

Cables and Accessories

Cables

- Only use ETAS cables, cables recommended by ETAS or other cables certified for the application.
- Route the cables such that they are protected against abrasion, damage, deformation and kinking.
- Do not place any objects on the cables.
- Do not use any damaged cables.
- The connector and connection must not be dirty.
- The connector and connection must be compatible.
- Correctly align the connector with the connection.
- Do not connect the connector and connection by force.

For detailed information about cables and cabling, see the user manual for the product.

Accessories

Use ETAS accessories, accessories recommended by ETAS or other accessories certified for the application. For detailed information about accessories, see the product's user manual.

Transport

- Only transport the product individually.
- Remove all connected cables before transportation.
- Do not transport the product by the connected cables.

Maintenance

The product is maintenance-free.

Cleaning

- Only clean the product when it is de-energized.
- Do not use cleaning agents that could harm the product.
- Do not apply cleaning agents directly onto the product.
- Use a dry or slightly dampened, soft, lint-free cloth.
- Make sure that no moisture enters the product.

Repairs

If repairs are required, send the product to ETAS.

Shipment and Packaging

You can find the return form and information about this process on the ETAS website: www.etas.com/en/support/hw_return_form.php.

Materials Subject to Declaration

Some ETAS products (e.g., modules, boards, cables) use components with materials subject to declaration in accordance with the REACH regulation (EC) no.1907/2006.

Detailed information can be found in the ETAS download center in the "REACH Declaration" information provided for customers: <u>www.etas.-</u> <u>com/Reach</u>. This information is continuously updated.

Technical Data

Ambient Conditions

Operating temperature range	-40 °C to +60 °C -40 °F to +140 °F
Storage temperature range (without packaging)	-40 °C to +85 °C -40 °F to +185 °F
Max. relative humidity (non-condensing)	95%
Max. altitude	5000 m / 16400 ft
Degree of contamination (IEC 60664-1, IEC 61010-1)	2
Protection rating (when closed)	IP42

Mechanical Data

Dimensions	92 x 48 x 24 mm
$(H \times W \times D)$	3.62 x 1.89 x 0.94 in
Weight	0.18 kg / 0.40 lb

Electrical Data

Operating voltage range	6 to 32 V DC
Max. current consumption	0.5 A
Overvoltage category (mains supply, IEC 60664-1)	II

Marking for UKCA Conformity

With the UKCA marking attached to the product or its packaging, ETAS confirms that the product meets the applicable product-specific British standards and directives. The UKCA Declaration of Conformity for the product is available upon request.