

**ETAS ES820.1**

**V7.5 Service Pack 2**

Release Notes

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# 1. Introduction

## 1.1. Definitions and Abbreviations

Term/Abbreviation	Definition
EHI	<b>ETAS Help Desk International</b>
HW	Hardware
KIR	<b>Known Issue Report</b> – For severe Problem Reports which occur after a release, ETAS has introduced the Known Issue Report to inform affected customer immediately. The current Known Issues of former versions can be found on the ETAS website: <a href="http://www.etas.com/kir">http://www.etas.com/kir</a>
PR	Problem Report
SW	Software
CDM	Calibration Data Manager
VSD	Variable Selection Dialog
EE	INCA Experimental Environment
LiMa	ETAS License Manager
HF	Hotfix
SP	Service Pack
MDA	INCA Measure and Data Analysis
MIP	Matlab Integration Package
MR	Multi-Recorders
OHI	Open Hardware Integration
OS	Operating System
WB	Walkback, Inca system error

## 1.2. References

None

## 1.3. Conventions

The following typographical conventions are used in this document:

Choose <b>File → Open</b> .	Menu commands are shown in boldface.
Click <b>OK</b> .	Buttons are shown in boldface.
Press <ENTER>.	Keyboard commands are shown in angled brackets.
The "Open File" dialog box is displayed.	Names of program windows, dialog boxes, fields, etc. are shown in quotation marks.

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Select the file setup.exe	Text in drop-down lists on the screen, program code, as well as path- and file names are shown in the Courier font.
A <i>distribution</i> is always a one-dimensional table of sample points.	General emphasis and new terms are set in italics.

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## 1.4. User Documentation

The ES800 user's documentation in PDF format can be found on the DVD.

FAQs and Webinars can be found in the ETAS Download Center or on the ETAS YouTube channel.

## 2. Product Definition

### 2.1. Functions at a glance

- Next-generation Drive Recorder module for challenging in-vehicle measurement applications.
- Unattended in-vehicle measurement and recording of data from ECUs, buses, networks, sensors, and measuring instruments.
- High performance and large memory capacity for recording a large number of signals over a long period of time.
- Exchangeable memory module for rapidly transferring large data volumes to the corporate network.

### 2.2. General Description

#### 2.2.1. System Prerequisites for Drive Recorder Configurator

The following minimum system prerequisites must be met:

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Required Hardware	1,0 GHz PC 1 GB RAM DVD-ROM drive Network adapter Graphics with a resolution of at least 1024 x 768, 32 MB RAM
Required Operating System	Windows® 7, Windows® 10, Windows® 11
<b>Required Free Disk Space</b>	500 MB (not including the size for application data)

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The following system prerequisites are recommended:

Required Hardware	2,0 GHz Dual-Core PC or equivalent 2 GB RAM DVD-ROM drive Network adapter Graphics with a resolution of 1280 x 1024, 128 MB RAM
Required Operating System	Windows® 7, Windows® 10, Windows® 11
<b>Required Free Disk Space</b>	> 2,0 GB

### 2.2.2. Hardware and Firmware Prerequisites

Mandatory precondition for the SP installation is the installation of the firmware version V3.6.0. This firmware version is installed within the recall by ETAS for version V7.2.9. An independent installation is not possible.

The version can be determined using the Drive Recorder Configurator. In the installation window there is an entry named "FirmwareApplication".

#### **IT IS NECESSARY TO UPDATE ALL FIRMWARE USING HSP V14 PRIOR TO USING INCA V7.5 WITH HARDWARE.**

The Hardware Service Pack (HSP) V14 updated versions are available on the ETAS Download page.

### 2.2.3. Software Prerequisites

To create an export-file (.exp) for the device, the highest INCA Version is recommended. There is a separate Drive Recorder Add-On delivered as part of the service pack INCA V7.5 that creates ES820 export-files.

Drive Recorder Configurator V7.5.2 is recommended for configuring the ES820 version V7.5.2. For ES820 Drive Recorder versions lower than V7.3.5 the Drive Recorder Configurator V7.2.19 can be used. The V7.4.x, V7.3.x and V7.2.19 can be installed in parallel on the customer PC.

For connected ES89x modules we recommend HSP V14.2.0 or higher.

### 2.2.4. Use Case Restrictions

- The stacking of the ES830 with the ES820 is not supported.
- V7.3.6 or higher: The usage of the new introduced Display App in parallel with the Remote Add-On is now possible.
- The Drive Recorder Configurator does not support any more the ES720.
  - In case needed, it is recommended to use the Configurator from the device.

### 2.2.5. Hints

- The device name ES820 must be manually added in Connection settings of the Drive

#### Recorder Configurator.

- The device name was changed to contain also the serial number of the device. Then it looks like e.g., this: ES820SN1300464.
- In a chain configuration with other devices, e.g., two ES891, the ES820 module must be configured to the head or the end of the chain.
- Do not remove the Power supply before ES820 is in Low Power Standby.
- Do not remove the External Storage or the USB Drive during a Measurement.
- A separate software license is required for some INCA Add-Ons (e.g., ODX, EIP).
- Stacking up new devices during operation of ES820 is not supported.
- For connected ES89x modules we recommend HSP V14.2.0 or higher.
- If the Drive Recorder is connected to a network outside the vehicle, especially via Wi-Fi or UMTS/LTE, under certain circumstances it may happen that unauthorized third parties could gain access to the ES820. This access could affect vehicle electronics and has potentially dangerous impact on the operational safety of the test vehicle. For this reason, the operation of a Wi-Fi or UMTS/LTE USB module is neither supported nor recommended by ETAS.

## 2.3. Delivery

The software is delivered with an installation routine on a <CD/DVD> including <Product> software, documentation, tools, utilities, and further information. All software documentation is available in the Portable Document Format (PDF), which requires Adobe® Reader®. You find the installation link in the <Tools> directory on the installation <CD/DVD>.

The <CD/DVD> contains the following items:

Directory	Meaning / Explanation
./Documentation	User's Guides, Hints, Safety Advice Customer Information

## 2.4. Installation

### 2.4.1. Installation Hints

To update the ES820 the following steps need to be executed:

Available version of device is lower than V7.2.9:

- In this case the ETAS recall is necessary - the device must be sent back to ETAS for HW and FW upgrade and the SW will be upgraded to version needed.

Update from any version V7.2.x - V7.4.x to V7.5.x:

- Installation to V7.5.x is possible via flash stick creation with Rescue Stick Creator for V7.5.x

See documentation coming with <D:\etasdata\DriveRecorder7.5>\RescueStickCreator

This installs a Windows® 10 image on the device together with an INCA V7.5.x or higher and a Drive Recorder Service Pack V7.5.x or higher.

Update via Service Pack from V7.3.5:

- From a version V7.3.5 also a Drive Recorder Service Pack V7.3.6, V7.3.7, V7.4.x or V7.5.x can be used for an upgrade.

#### Further important installation hints:

- A downgrade from Windows® 10 back to Windows® 7 is not allowed due to CLA (customer license agreement) with Microsoft.
- A flashing procedure with V7.5.x takes approx. **30 minutes**, 15 min for first part until the device is sent the first time to Low Power Standby and another 15 min for the second part until the device is sent the second time to Low Power Standby.
- An upgrade via an SP of V7.5.x takes approx. **50-60 minutes**, because already the Windows® updates, which are also executed during this upgrade, take about 40 minutes.

#### Installation of ES820 for usage within PANTARIS context:

- The ES820 can be used in the context of PANTARIS for e.g., remote measurement and remote calibration.
- For this purpose, the ETAS/BEG RVA PANTARIS software must be installed in addition to the ES820 basic software.

Once an ES820 has been used in the context of PANTARIS, this device can only be used in normal operation again once the PANTARIS Mode is set to off in the Hardware Settings / Device Options / General Settings.

## 3. Changes

This chapter describes changes with respect to the previous version of ES820.1, V7.5

### 3.1. What's New

#### Used INCA V7.5.2 integration incl. Add-Ons

##### Drive Recorder software V7.5.2:

- Windows® 10 support
- INCA V7.5.2 support
  - Drive Recorder V7.5.2 supports currently the same HW like INCA V7.5.2
- INCA Add-Ons support
  - Drive Recorder Add-On
  - Vector-Hardware Add-On
  - FLEXRAY



- LIN
- ODX
- INCA-EIP
- NLS Support for the Display App
  - The first version of the Display App supported only the English language. With this product enhancement, users can select their preferred language from the languages officially supported by ETAS (English, German, French, Chinese, Japanese).
- Display ROE (remote operational environment) Add-On on demand instead of Display App
  - Customers use the Display App to support drivers during test drives. At the same time, their engineers want to be able to remotely change the Drive Recorder configuration or perform remote calibration with the ROE Add-On.
  - It is now possible for the driver to use the Display App during normal driving and respond to the engineer's request to perform remote activities with the ROE Add-On.
- **Since V7.2.16** support of 2nd INCA master on the network
  - If a recording job is running on the ES820 and a 2nd INCA master appears on the network, then the recording job will be interrupted. Once no 2nd INCA master is on the network, the interrupted recording job will resume.
  - If a 2nd INCA master is on the network, no recording job can be started, i.e., it is blocked.
  - Recording jobs that are blocked after the first blocked/interrupted recording job are not restarted, but only the first blocked/interrupted recording job is restarted.
- **Since V7.2.19** support of the Display App.
  - The description of the Display App can be found in the Manuals directory once the Driver Recorder Configurator V7.2.19 or higher is installed.

### Drive Recorder Configurator V7.5.2

- **Since V7.2.17:** The Rescue Stick Creator files are delivered now together with the Drive Recorder Configurator:
  - The files required for the creation of the Rescue Stick are copied to its default home directory during the installation of the Drive Recorder Configurator, e.g., under:  
D:\etasdata\DriveRecorder7.5>\RescueStickCreator
  - The user must download by himself the image from the ETAS Download Server and place it into:  
D:\etasdata\DriveRecorder7.5>\RescueStickCreator\images
  - The documentation for creating and using the Rescue Stick is delivered together with the files described above, see:  
D:\etasdata\DriveRecorder7.5>\RescueStickCreator\Readme.pdf

#### **Important note:**

For Rescue Sticks with a version lower than V7.3.x the Rescue Stick Creator for V7.2.19 must be used otherwise Rescue Stick Creator for V7.3.x must be used for

V7.3.x images and additionally the Rescue Stick Creator for V7.4.x must be used for V7.4.x images, and so on.

- **Since V7.2.19:** The configurator supports the activation of the Display App.
- **Since V7.4.2:** Acoustic signals can be disabled in the configuration tool.
- **Since V7.4.4:** The new FNE licensing model is available, which replaces the FNP licensing model. You must be aware about the following:
  - If you want to flash the ES820 with a Rescue Stick and a FNE license is active, you must return the FNE license before you flash the device otherwise the license gets lost, and you must call the ETAS support to provide the device with a valid license.
  - Use the latest version of the Rescue Stick Creator which is shipped with Drive Recorder Configurator V7.4.4! It is extended with a warning, which informs you about the possible loss of the FNE license, see below.

**Flashing an ES820 with a rescue stick without returning an active FNE license leads to permanent loss of the license!**

**Please return the license before flashing the device. Activation can be done by the user afterwards again.**

**In any other cases please contact ETAS support.**

In case the user who creates the Rescue Stick is different to the one who applies the Rescue Stick to the device, please make him aware of the implications.

- You must adapt the internet proxy settings in the ETAS License Manager to the network environment in which the ETAS License Manager is working. For this, open the ETAS License Manager and click Device > Settings. You can adjust the internet proxy settings in the Internet Proxy window area.  
The default setting for the **Proxy Mode** is **Auto**.  
If there is no proxy, set the **Proxy Mode** to **None**.  
Otherwise, set the **Proxy Mode** to **Manual** and adapt the proxy address in the first line of the Internet Proxy window area.
- **Since V7.4.5:** The FNE license is saved and restored while flashing the V7.4.5 and above, so no manual return and activate of the FNE license is needed anymore.
- **Since V7.5.1:** The FNP license is no longer supported. To use V7.5.1 a FNE license is needed.
- For the usage of following hardware combination ES820 + SOME-IP MC Add-On + ES886.2 with the active option "Wait for Devices" in the recording job, the recording won't start. To get the recording started this option needs to be deactivated.

### Latest Windows® 10 Security Updates

With latest this SP the newest Windows® 10 security patches are installed.

## 3.2. Compatibility to Earlier Releases

For the configuration of the ES820 Module the Drive Recorder Configurator V7.5.2 is recommended.

### 3.3. Fixed Problems

#### 3.3.1. This section describes the set of fixed problems of the current released version of Drive Recorder software V7.5.2

Problem Number	Title
EHI #768360	ES820 Rescue Stick Tool: Messages not clear

#### 3.3.2. History of fixed problems in previous versions of Drive Recorder software V7.5.x

##### 3.3.2.1. V7.5.1

NA

#### 3.3.3. History of fixed problems in previous versions of Drive Recorder software V7.4.x

##### 3.3.3.1. V7.4.8

Problem Number	Title
EHI #750732	<p>In some cases the ES583 USB device is not recognized as ETAS device anymore.</p> <p><b>Recommendation:</b> Here a reset (disconnect ES583.1 for ~10s) would be sufficient.</p> <p>In some cases, the USB pen drives are not recognized properly after leaving Service Mode.</p> <p>To use USB pen drives as data sink for recording (permanent attachment) is not recommended anymore and as known yet also not used at customer.</p> <p><b>Recommendation:</b> Use much faster and reliable SSD drives instead.</p>

##### 3.3.3.2. V7.

NA

##### 3.3.3.3. V7.4.6

Problem Number	Title
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EHI #733998	<p>[PANTARIS] File upload and download is not working in case we have the new client installer and a Gateway with an old version.</p> <p><b>Recommendation:</b></p> <p>Before installing new CCD software on the ES820, the customer must check if the version is compatible with current version of the gateway software.</p>
EHI #717429	<p>FNP license migration throws error before final step- despite the migration is successful and an FNE license is available afterwards an issue is shown before migration is done.</p>
EHI #725513	<p>MDF3.x measure file not created as expected when no more free space is available on the external USB storage (sporadic)</p> <p>In some cases, it could be that the recording is stopped since the storage on the target device is not sufficient. The temp files of the MDF3.x are available but it is still not possible to merge them due to insufficient free storage on the target device.</p>
EHI #722337	<p>When the "PSCI PIN" button is pressed, the device enters "LowPowerStandby" rather than "FastBootStandby," instead (sporadic). This has only impact on the start performance of the ES820.</p> <p>From standby until recording of Democalc the duration for</p> <ul style="list-style-type: none"> <li>- FBS is 30 sec</li> <li>- LPS is 60 sec</li> </ul>
EHI #735784	<p>The time from Standby to Recording state exceeds the upper limit (60s for LPS, 30s for FBS).</p> <p><b>Recommendation:</b></p> <p>After several SP installations in a row without flashing in between e.g., prolonged boot times from FBS or LPS might occur, then flash the ES820 to get a clean OS.</p>
EHI #737556	<p>[PANTARIS] Shutdown File is not getting uploaded to PANTARIS Platform</p> <p>The behavior of the file transfer from the CCD has changed in that way that the file is now transferred to the PANTARIS cloud directly from the upload folder, no more buffering of the file on the gateway! A workaround for the PANTARIS mode has been implemented in that way, that the timeout before the ES820 shuts down has been extended to 60 seconds to give the gateway the chance to upload it. This concept is not effective in all cases! In case that the gateway has no internet connection the file will be not transferred and after the 60 S timeout it will be no longer accessible for the gateway, even if the internet connection resumes! The file then will be transferred the next time the ES820 is powered on.</p>

### 3.3.3.4. V7.4.5

Problem Number	Title
EHI #718513	ES820 is not able to measure due to target server issue
EHI #709704	<p>Encrypted ES820 device unlocked with Master control error.</p> <p>The device might boot more than one time after waking up from low power standby.</p>

**3.3.3.5. V7.4.4**

Problem Number	Title
EHI #706317	ES820 transfer measure data to PATAC SFTP server failed
EHI #714717	ES820 cannot realize resume from breakpoint with SFTP settings
EHI #694594	Remote user cannot log-off from DisplayApp
EHI #717148	Client Channel INCA is not available, unable to connect to TgTSvr

**3.3.3.6. V7.4.3**

Problem Number	Title
EHI #705899	Trigger PSCI Pin on ES820 shuts down to LPS instead of FBS (Sporadic) – When preparation for FBS failed.

**3.3.3.7. V7.4.2**

NA

**3.3.3.8. V7.4.1**

Problem Number	Title
EHI #673832	[ES820 & CALPONIA] After a CALPONIA RVA session the DisplayApp is not reactivated
EHI #674031	[ES820 & ROE & CALPONIA] INCA started on ES820 via ROE writes measurement files to a directory which is not processed by CALPONIA

**3.4. Known Issue Reports**

If a product issue develops, ETAS will prepare a Known Issue Report (KIR) and post it on the internet. The report includes information regarding the technical impact and status of the solution. Therefore, you must check the KIR applicable to this ETAS product version and follow the relevant instructions prior to operation of the product.

The Known Issue Report (KIR) can be found here: [www.etas.com/kir](http://www.etas.com/kir)

**3.5. Known Issues**

This section describes the set of known problems of the released version of ES820 V7.5.2.

### 3.5.1. Software related Items

Problem Number	Title
EHI #NA	All INCA known issues and limitations up to V7.5.2 apply to the ES820.
EHI #NA	All HSP known issues and limitations up to V14.2.0 apply to the ES820.
EHI #NA	Large experiments that run for a long period of time should be stopped after about 8 to 10 hours, to avoid that the system runs out of memory to avoid data loss.
EHI #NA	Measurements at data rates beyond 13 Mbytes/s lasting longer than 12h may fail and no error is indicated
EHI #NA	Exporting an Experiment for use on the ES820 in INCA version 7.2.2/HF2 or lower may require an existing WSMD file in the export folder to be manually deleted.
EHI #NA	IP reassignment in stacked mode with an ES820 is not supported
EHI #556771	Changing parameters of the External Application within a recording job is not supported. The job needs to be re-configured after a parameter changed
EHI #674087	[ES820 & ROE] If the driver cancels the ROE application on the monitor, INCA cannot be closed if the confirmation from the expert to close is missing.
EHI #733940	MasterControl Error Running out of memory for recorder.
EHI #744193	<p>Due to hardware limitations of the ES820 (RAM, CPU, ...) it cannot be guaranteed that every experiment that runs on an INCA PC will also run on an ES820.</p> <p>An experiment with</p> <ul style="list-style-type: none"> <li>• &lt;= 38000 signals</li> <li>• &lt;= 13 MB/s throughput</li> <li>• &lt;= 1 FETK</li> </ul> <p>should run at least for eight hours.</p>
EHI #763483	<p>From Version V7.4.4 to V7.4.8 probably a non-unique host ID for the ES820 was created when FNE licensing was used. This led to an incorrect assignment of the device in the license portal.</p> <p>With an update to Versions greater than or equal V7.5.1 this is fixed in that way that the FNE license will not be retained during the update process. In case of having no license after the update, please get in contact with the ETAS support.</p>
EHI #764228	With Version V7.5.1 MAC based licenses are no longer supported. These licenses must be migrated to FNE ones using the Drive Recorder Configurator before updating to V7.5.1. Unfortunately, this process is not working yet. In case a migration is needed, please get in contact with the ETAS support.
EHI #762853	<p>After flashing an image V7.5.1 if no valid license is available the ES820 does not show a warning in Drive Recorder Configurator nor is the missing license indicated by a blinking error LED on the device.</p> <p>Recommendation: Reboot the device one time.</p>

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EHI #768307	<p>Online license activation for drive recorder proceeds not properly.</p> <p><b>Problem:</b> The HostID 52750C446E04B8006EBF75B7BDF7498231AEF748D8235EBBE13405DA9 43DC02800000000000000000 is not unique.</p> <p><b>Root cause:</b> With V7.4.6-V7.4.8 this non unique HostID was created if needed on the ES820 devices.</p> <p><b>Solution:</b> With V7.5.1 or later the image/SP while being flashed/installed creates a new unique HostID. For the V7.5.1 Rescue Stick or later the information from the older version device is not preserved anymore. Please always use the latest version of the Rescue Stick Creator to create a Rescue Stick.</p> <p><b>Workaround:</b></p> <ol style="list-style-type: none"><li>1. Enter the service mode.</li><li>2. Return the licenses.</li><li>3. Connect via RDP to the device.</li><li>4. Remove in the LiMA/FNE directory (C:\ProgramData\ETAS\FlexNet\fne\license) the non-unique HostID directory and the data.bin.</li><li>5. Quit the service mode.</li><li>6. Now the licenses can be activated as expected.</li></ol>
EHI #772308	<p>ES820 Installation of SP 7.5.2 on Image 7.4.8 will take longer than normal, approximately one hour. Please be patient.</p>
EHI #772310	<p>DisplayApp user session can't be logged in</p> <p><b>Problem:</b> After installation of service pack V7.5.2 on top of a previous version of the Drive Recorder software (without installed Display App) it is not possible to login to the Display App.</p> <p><b>Workaround 1:</b> Install the Display App on the previous version on the Drive Recorder before upgrading with service pack V7.5.2.</p> <p><b>Workaround 2:</b> If you encounter the problem with version V7.5.2 of the Drive Recorder software, do the following steps:</p> <ol style="list-style-type: none"><li>1. Connect to the ES820 via Drive Recorder Configurator</li><li>2. Enter Service Mode</li><li>3. Connect to the ES820 via RDP with the DriveRecorder user</li><li>4. Open the Task Manager in the RDP session</li><li>5. Disconnect the user session of the DisplayAppUser</li><li>6. Close Task Manager</li><li>7. End the RDP session</li><li>8. Quit Service Mode</li></ol> <p><b>Workaround 3.</b> If possible just flash the device with image V7.5.2.</p>

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### 3.5.2. Hardware related Items

Problem Number	Title
EHI #557205	Hot unplugging a USB drive during measurement needs a restart of the ES820. Closed, no further solution planned.
EHI #584792	Daisy Chain Modules: ES820 cannot connect the modules after work with INCA. Closed with unsolvable.
EHI #598391	ES820 Recording not starting on WakeUp FlexRay and FETK. Closed.
EHI #640246	Installing Service Pack with USB connected to ES820 is not recommended. On Installing ServicePack with USB connected to ES820 - Device never turns to "Active" Closed with unsolvable.
EHI #671225	In the event of a power stack interruption, measurements acquired before the interruption may not be restored to valid measurement file. Closed with unsolvable.

## 4. Hints.

None

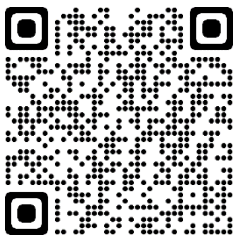
## 5. Hotfix Information

None

## 6. Contact Information

### 6.1. Technical Support

For details of your local sales office as well as your local technical support team and product hotlines, take a look at the website: [www.etas.com/hotlines](http://www.etas.com/hotlines)





## 6.2. ETAS Headquarters

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