

IM Connect+[®]

Android application for commissioning,
configuration and diagnostics

User manual



IM Connect+

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1. Document publishing index

Document version	Date	Modification
01	22/04/2025	1 st version
02	19/08/2026	IOS compatibility added

2. Contact of the organization

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4106 Therwil Switzerland

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info@integra-metering.com
www.integra-metering.com

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The figures and information in these instructions are subject to technical changes that have become necessary to improve the product.

3. Safety rules and precautions

3.1. Information on the user manual relating to legal notice

This guide is intended for trained specialized personnel. For this reason, no basic working steps are included.

DANGER	
	Danger This safety warning indicates a high risk which will result in serious personal injury or death. - Measures to avoid incidents.
WARNING	
	Warning This safety warning indicates medium risk that could result in serious injury. - Measures to avoid incidents.
CAUTION	
	Caution This safety warning indicates a low risk which could result in minor injury or mechanical damage. - Measures to avoid incidents.
NOTICE	
	Notice Indicates an action or measure which, if performed incorrectly, may have an indirect effect on the operation of the device. - Measures to avoid malfunctions.
COMMENT	
	Comment Comment, provides information and recommendations for efficient and trouble-free operation. - Measures to avoid malfunctions.
REFERENCE	
	Reference Refers to additional sources.

3.2. Safety instructions and preventive measures

The manufacturer takes over no responsibility if the following safety instructions and precautionary measures are disregarded:

- Changes to the device, which are implemented without prior written approval of the manufacturer, lead to the immediate termination of product liability and warranty.
- Installation, operation, maintenance, repair and decommissioning of this device must only be performed by specialists authorized by the manufacturer, operator or owner of the device. The specialist needs to read and understand the entire installation and operation manual and is obliged to follow these instructions.
- Control the supply voltage and information given on the type of plate, before the device is installed.
- Check all connections, settings and technical specifications of any available peripheral devices.
- Open the housing or parts of the housing, which contain electrical or electronic components, only if the electric energy is turned off.
- Touch no electronic components (ESD sensitivity).
- Expose the system concerning the mechanical load (pressure, temperature, IP protection etc.) maximally to the specified classification.



- For works concerning mechanical components of the system, the pressure in the pipe system must be released or the temperature of the medium needs to be brought to harmless values for humans.
- No information stated here or anywhere else releases planners, engineers, fitters and operators from their personal careful and comprehensive evaluation of the respective system configuration in terms of functionality and operational safety.
- The local working and safety standards and statutes need to be met.

3.3. IM Connect+® security rules

The IM Connect+® software is designed and intended exclusively for use as a tool for configuration, diagnosis and commissioning of INTEGRA Metering AG communicating products.

Inappropriate or improper use may result in the operational safety of the device no longer being guaranteed. The manufacturer waives any liability for resulting damages of persons and materials.

4. Product description

4.1. Presentation

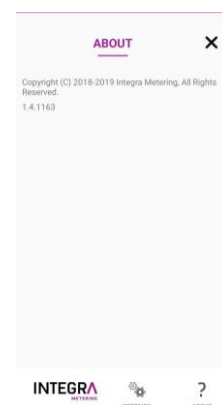
IM Connect+® is the new generation of software application designed for commissioning, diagnostics and configuration of INTEGRA Metering AG communicating products.

4.2. Technical data

OS compatibility	Runs on Android & iOS Requires Android 9.0 or higher Requires iOS 15.0 or higher Available with Google Play® or via the App Store
Communication interface	NFC, Bluetooth
Supported products	CALEC® ST III Standard & Smart CALEC® ST III Advanced aquastream® aquaradio®
Main features	Initial setup, Alarms reset, Parameters adjustments, Switching on / off radio modules, Changing M-Bus parameters, Modification of settings (pulse weight, serial numbers), Reading out the events for detailed inspections on site, Accessing of Data logger information for deeper analysis, Setup of alarms detection (threshold parameters, durations...), Data export for further operations.

4.3. About (Version and Copyright)

In this tab of the application, you have access to the current version that you have on your smartphone.



5. Installation

IM Connect+® software must be properly installed on your Android smartphone. It is available under Google Play® and can be downloaded there directly and freely.

REFERENCE



Reference

IM Connect+® configuration software can be downloaded directly by clicking on the following link or by scanning the corresponding QR code:



<https://play.google.com/imconnectplus>



<https://apps.apple.com/ch/app/im-connect/id6786625536>

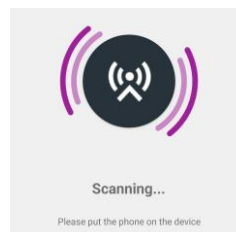
6. Using IM Connect+®

6.1. Scanning a device

- To connect to your counter, you must have your smartphone and the IM Connect+® application.
- Click the "SCAN DEVICE" button to start an NFC scan.



Scan for meters / modules



The search begins

- Position your smartphone on the meter at the location of the NFC antenna.



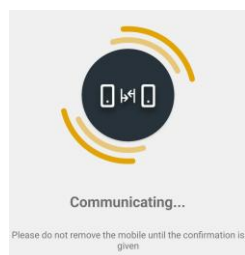
NOTICE



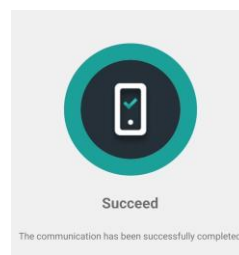
Notice

If you want to scan a CALEC® ST III Standard / Smart / Advanced, you must activate your Bluetooth throughout your use.

- Do not touch the phone during handling.



In communication



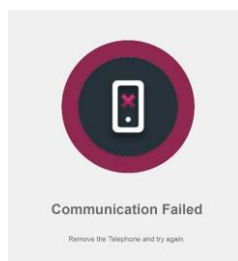
The device is connected

NOTICE



Notice

It is mandatory to know the location of the NFC interface of your smartphone to have a good communication between the device to be configured and the smartphone.



Connection Failure

In the case of the message “Communication failure”, you must remove the smartphone then put it back to restart the scan.

COMMENT

Comment



Check:

- The NFC interface of your smartphone, it must be activated.
- The position of your smartphone: the NFC antenna must be correctly positioned on the meter / module.

COMMENT

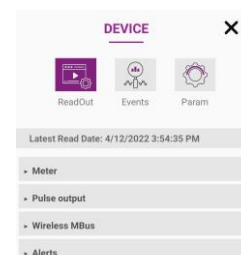


Comment

If you scan a CALEC® ST III Standard / Smart / Advanced, check the Bluetooth interface of your smartphone, it must be activated throughout your use.

6.2. Readout (information)

The data available depends on the meters / modules, they are organized by group as shown in the examples below. Click on the pane to access the information.



6.2.1. Description of drop-down panes

Meter:

In this section contains all the identity metrological and pressure data for your meter / module.

Meter	
NFC Tag Id	484685AE67480
Device Name	Topas LW8
Comm UID	99999999
Net Volume (m3)	0.772
Forward Volume (m3)	0.796
Reverse Volume (m3)	0.024
Flow (l/h)	0.000
Ytd	52FAD
Device Time	1/29/2002 12:49
Firmware Version	0.74
Customer text field	
Fabrication Date	1/1/0001 01:00
Meter SN	
Mode	User
Remaining Battery (days)	5451
Pressure (bar)	0

Alarms / Alerts:

In this section, you will find the alarms of your meter / module.

Alerts	
Air bubbles	No Alarm
Overload	No Alarm
Leakage	No Alarm
Frost	No Alarm
Heat	No Alarm
Over temperature	No Alarm
No consumption	Alarm in progress
Low Battery	No Alarm
Reverse Flow	No Alarm
Burst	No Alarm

Pulse output:

In this section you will find the weight and size of the meter / module pulse output.

Pulse output	
Pulse Length (ms)	50
Pulse weight (l)	100

M-Bus:

In this section, you will find information relating to M-Bus communication: address, transmission speed etc.

M-Bus	
Primary Address	253
Secondary Address	0
Baudrate	2400
Comm UID	10138376

Wireless M-Bus:

In this section you will find information related to wireless M-Bus communication: UID, transmission interval.

Wireless M-Bus	
Comm UID	10138376
Transmission Interval (s)	16

LoRa:

In this section, you will find information related to communication LoRaWAN: Dev EUI, reference time, sending time

LoRa	
Dev EUI	70B3D5B6F80061BC
Join EUI	70B3D5B6FF000000
Reference hour	00:00
Send hour	12:00

aquastream® / aquaradio®:

In this section, you'll find all the data related to the life of your meter / module, operating time battery life, firmware version etc.

aquastream	
NFC Tag Id	4AE78D2767280
aquastream SN	99999999
Device Name	Aquastream Lora
Operation Time (days)	115.21:39:50
Device Time	4/29/2022 09:43
Battery life time (years)	15.68
Firmware Version	2.02
Hardware Version	1
Fabrication Date	1/1/0001 01:00
Installation Date	1/1/0001 01:00

Energy:

In this section you will find information related to energy metering: consumption, volume, pulse weight.

COUNTER	
Energy 1	208196.000 KWh
Volume 1	2370.600 m3
Volume 2	0.000 m3
Pulse weight	1.000 L
Installation side	COLD

Instant:

In this section you will find real-time information: temperature, heat factor, performance, flow, specific density, etc.

INSTANT	
Temperature Hot side	130.000 °C
Temperature Cold side	53.900 °C
Temperature difference (delta T)	76.080 K
Performance 1	0.000 KW
Flow 1	0.000 m3/h
Specific Heat factor	1.154
Density	0.987 KG/L
Flow 2	0.000 m3/h

Time:

In this section you will find time information: date, time, winter / summer time, hour in alarm, hour in error etc.

TIME	
Date	10/27/2021
Time	00:53
Day	WEDNESDY
Winter/Summer activation	OFF
Winter/Summer Time	WINTER
Operating hours	345 h
Hours in alarm	0 h
Hours in error	0 h

Input:

In this section, you'll find information about the input: input type, function, weight, pulse speed, th/tc alarm lower limit etc.

INPUTS	
Function	VOLUME
Pulse weight	1.000 L
Installation side	COLD
Status	OFF
Upper limit th/tc alarm	200.000 °C
Lower limit th/tc alarm	0.000 °C
Input number	1

Output:

In this section you will find information about the output: the status, the assigned function, output number etc.

OUTPUTS	
Function	OFF
Output number	1

I Out:

In this section you will find information about the output: the status, the assigned function, output number etc.

I Out	
Function	OFF
Input number	3

Config:

In this section you will find information regarding the configuration of your device: safety use level, type of sensor temperature, creeping quantity suppression, remanence factor for performance, damping factor for performance / flow, damping factor for temperature value, Reset counter, alarm, logger and all other values, Limit value for display dT-shortfall, Automatic sensor adjustment, Period for max logger values, Safety key etc.

CONFIG	
Safety user level	USER
Type of temperature sensor	PT100
Creeping quantity suppression	0.500 K
Remanence factor for performance	8.000 SEC
Damping factor for performance / flow	50.000 %
Damping factor for temperature value	0.000 %
Reset counter, alarm, logger and all other values	CANCEL
Limit value for display dT-shortfall	-15.000 K
Automatic sensor adjustment	CANCEL
Period for max logger values	60 MIN
Safety key	0

System:

In this section you will find information about the system of your device: serial number, manufacturing date, hardware version etc.

SYSTEM	
Serial number	99999999
Calculator function	ST-STD
Manufacturing date	1/1/2000
Firmware version of the Main Board	3.01.05
Firmware version of Calculator	3.01.05
Hardware version	30.30.00.16
Checksum of Firmware	0

Radio interface:

In this section, you'll find information on the radio interface, radio type, transmission interval and AES key.

Radio Interface	
Reference hour	Disabled
Send hour	03:00
Send period	0
Dev EUI	70B3D5B6FF000000
Radio Type	LoRaWAN
Lora ADR	Off
Lora Acknowledge	Off



6.2.2. Information available per product

Drop-down panes for Aquastream®				
	aquastream® M-Bus	aquastream® M-Bus / Pulse	aquastream® Radio W8	aquastream® Radio L8
Meter	X	X	X	X
Alerts / Alarms	X	X	X	X
aquastream	X	X	X	X
Pulse Output		X		
M-Bus	X	X		
Wireless M-Bus			X	
LoRa				X

Drop-down panes per product	
aquaradio®	CALEC® ST III Standard / Smart / Advanced
Meter	Counter
Alerts / Alarms	Instant
Input	Time
Radio interface	Inputs
aquaradio	Output
-	I Out
-	M-Bus
-	wM-Bus
-	Config
-	System

6.3. Events

6.3.1. Events menu

Events are stored in the meter / module and can be read by this menu. This function reads all the events stored in the meter / module, such as alarms, malfunctions etc.

To access the events of your meter / module:

- Click on the "Events" menu.
- Update the events by clicking on the refresh button.



- Follow the scan procedure displayed on your screen.

COMMENT



Comment

The reading time may take some time, the longer the period you select, the longer the reading time will be.

ID	Info	Air Bubble	Date	Time
E2	Info	Air Bubble	4/25/2022	13:39
E2	Info	Air Bubble	4/25/2022	13:38
E2	Info	Air Bubble	6/8/2021	15:31
E2	Info	Air Bubble	6/8/2021	15:31
E2	Info	Air Bubble	6/7/2021	07:38
E2	Info	Air Bubble	6/7/2021	07:38
E2	Info	Air Bubble	6/7/2021	07:36
E2	Info	Air Bubble	6/7/2021	07:36
E2	Info	Air Bubble	3/23/2021	16:11
E2	Info	Air Bubble	3/23/2021	16:11

6.3.2. Export

You can export events in CSV format:

- Click on the button "EXPORT".
- Choose to save locally or share with another app.

EXPORT

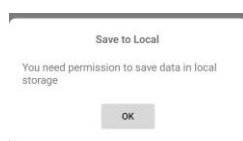
Where do you want to export your data to?

SAVE TO LOCAL

SHARE WITH ANOTHER APP

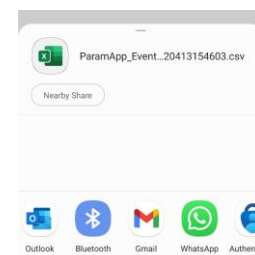
Local export

To export all data locally, you must allow the application to access multimedia resources. Files are stored in CSV format in your phone, example: "Galaxy A5 (2017)\Phone\Documents".



External export

It is possible to share data using Android functions via different media: link copy, email, OneDrive etc.



6.3.3. Events available per product

Events menu		
	Available	Not available
CALEC® ST III Standard / Smart / Advanced		X
aquaradio®	X	
aquastream®	X	

6.4. Param

6.4.1. Change values

The data available depends on the meters / modules and may be configurable.

- To configure your meters / modules, click on the "Param" button.
- Click on the different panes present to have access to the modifiable values.
- Once the new data has been entered, click on the upload button to send them to the meter / module.



- Follow the information to save new data in the meter / module.



6.4.2. Description of drop-down panes

Meter:

In this section, you can enter details about your meter / module and export them to this one.

Meter	
Meter SN	123456
Customer text field	
Diameter (I)	Unspecified
Index Unit	m3

Alerts:

In this section you can activate different alarms: reset tamper, reverse flow, max flow, overload, burst. Then export to your meter / module.

Alerts	
Reset Tamper	No
Reset Reverse flow	No
Reset Maxflow	No
Reset Overload	No
Reset Burst	No

Operation:

In this section you can choose the index and flow decimal, then export it to your meter / module.

Operation (user mode)	
Index Decimal	2
Flow Decimal	2

Display Duration:

In this section, you have access to configurations: net or forward volume, volume, actual flow, test mode duration. Then export it to your meter / module.

Display Duration (user mode)	
Volume To Display	Net Volume
Volume (s)	10
Reverse Volume (s)	2
Actual Flow (s)	2
Test Mode Duration (h)	8

Commands:

In this section, you have access to commands: set time, reboot and the different meter / module modes. Then export it to your meter / module.

Commands	
Set Time	No
Reboot	No
Set Mode	Unchanged

Inputs:

In this section, you can choose the type of input (M-Bus, Pulse, etc.), the mode, the specificity etc. You can then export it to your meter/module.

Inputs	
Input Type	Mbus
Mbus Period (s)	2300
Baudrate	9600

Pulse Output:

In this section, you can choose the size and weight of the pulse. Then export it to your counter / module.

Pulse output	
Pulse Length (ms)	50
Pulse weight (I)	100

M-Bus:

In this section, you can configure the primary and secondary address and choose the baud rate. Then export it to your meter / module.

Mbus	
Primary Address	253
Secondary Address	0
Baudrate	2400

Radio Interface :

In this section, depending on your meter/module, you can modify the emission conditions of your meter / module. You can then export them to your meter / module.

Radio Interface	
Reference hour	Disabled
Send hour	03:00
Send period	0
Radio Type	LoRaWAN
Lora ADR	Off
Lora Acknowledge	Off
Lora Join	No
Lora Message	No

Wireless M-Bus:

In this section, depending on your counter / module, you can enter a radio transmission key, choose the radio control and the transmission interval. Then export them to your meter / module.

Wireless Mbus	
Radio Control	Nothing
Transmission interval (s)	16

LoRa:

In this section, depending on your meter / module you can configure: the key EUI LoRa join , reference hour, LoRa message. Then export to your meter / module.

LoRa	
Join EUI	70B3D5B6FF000000
Reference hour	00:00
Lora Join	No
Lora Message	No

6.4.3. Modification available per product

Drop-down panes for the aquastream®				
	aquastream® M-Bus	aquastream® M-Bus / Pulse	aquastream® Radio W8	aquastream® Radio L8
Meter	X	X	X	X
Alerts	X	X	X	X
Commands	X	X	X	X
aquastream	X	X	X	X
Pulse Output		X		
M-Bus	X	X		
Wireless M-Bus			X	
LoRa				X

Drop-down panes per product	
aquaradio®	CALEC® ST III Standard / Smart / Advanced
Meter	Inputs
Alerts	Outputs
Inputs	I Out
Radio interface	M-Bus
-	Config
-	-
-	-

6.5. Historical (Data Logger)

6.5.1. Historical menu

This function allows you to view all the historical values stored in the meter / module, the periodicity can be chosen between hourly, daily, monthly, yearly.

To access your meter / module history:

- Click on the "History" menu.
- Update the history by clicking on the refresh button.



- Follow the scan procedure displayed on your screen.
- Click on a drop-down pane to see the historical .



COMMENT



Comment

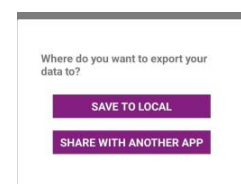
The reading time may take some time, the longer the period you select, the longer the reading time will be.

6.5.2. Export

You can export history in CSV format:

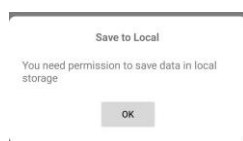
- Click on the button "EXPORT".
- Choose to save locally or share with another app.

EXPORT



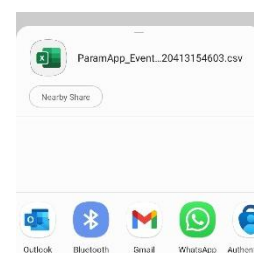
Local export

To export all data locally, you must allow the application to access multimedia resources. Files are stored in CSV format in your phone, example: "Galaxy A5 (2017)\Phone\Documents".



External export

It is possible to share data using Android functions via different media: link copy, email, OneDrive etc.



6.5.3. Historical available per product

Historical menu		
	Available	Not available
CALEC® ST III Standard / Smart / Advanced		X
aquaradio®	X	
aquastream®	X	

O = Available depending on meter / module communication mode.

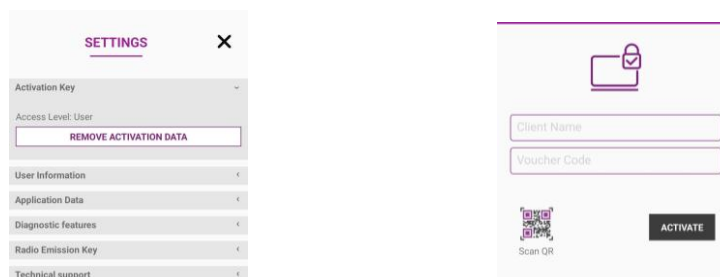
7. Setting

7.1. Activation key for license

7.1.1. Activate your license

To activate your "User" license, you must enter your activation key.

- To do this, go to the "Settings" menu.
- Click on the "Activation Key" pane then on "Enter the Activation Key".
- Enter your name and activation code, then click the "QR Scanner" button.



7.1.2. User license description

The User license allows you to have access to all the features of the application, so you can perform diagnostics, modifications and access the event history of your meter / module.

To obtain a "User" license, contact the sales department. An activation key will then be provided to you, it is unique and can only be used once on a particular smartphone.

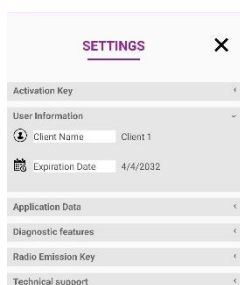
7.1.3. Anonymous license description

The Anonymous license limits you in the features: the information and the modifications are not all available.

To obtain a "User" license, contact the sales department. An activation key will then be provided to you, it is unique and can only be used once on a particular smartphone.

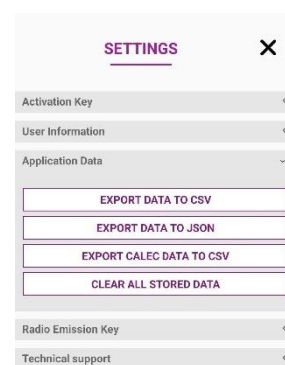
7.1.4. User information

In this pane you can have access to the name of the user and the expiration date of your license.



7.2. Application data

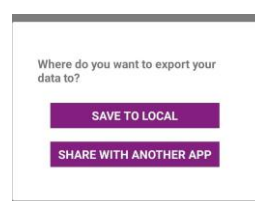
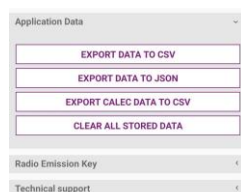
In this pane you can export all the information of all your counters or delete them.



7.3.1. Export

Choose an export format (if it's a CALEC click on "Export CALEC data to CSV").

Choose to save locally or share with another app.

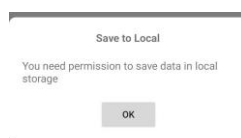


Local export

To export all data locally, you must allow the application to access multimedia resources.

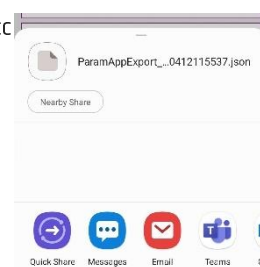
Files are stored in CSV format in your phone, example: "Galaxy A5

(2017)\Phone\Documents".



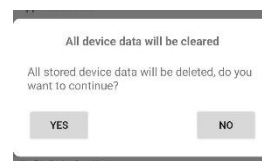
External export

It is possible to share data using Android functions via different media: link copy, email, OneDrive etc



7.3.2. Clear all stored data

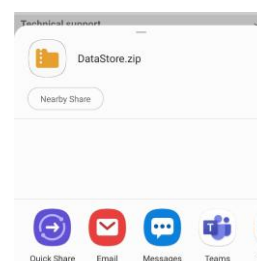
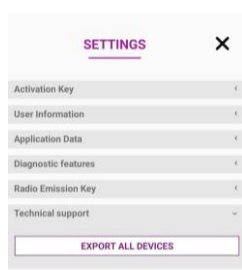
To delete all data from your meters / modules, click on the button "Delete all stored data".



7.4. Technical support

In case of problem you can contact technical support and "Export all devices" via email or other. To do this:

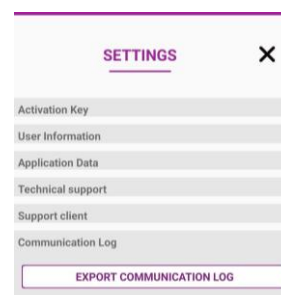
- Open the "Technical support" section.
- Click on "Export all devices".



7.5 Communication Log

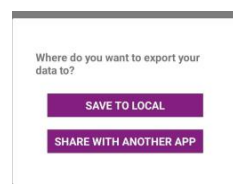
7.5.1. Description of the communication log

In this pane, you can export all the logs of all your meters and send them to an INTEGRA Metering AG technician.



7.5.2. Export

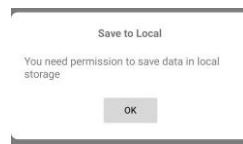
Choose to save locally or share with another app.



Local export

To export all data locally, you must allow the application to access multimedia resources.

Files are stored in CSV format in your phone, example: "Galaxy A5 (2017)\Phone\Documents".



External export

It is possible to share data using Android functions via different media: link copy, email, OneDrive etc.

