

# Device Json API

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## Introduction

The “Device Json API” is an interface to the “Esders Connect App”, which allows to read out measurements from the device formatted in JSON.

## Requirements

To use this “API”, following requirements have to be satisfied:

- The newest version of the “Esders Connect App” must be installed
- An Android device

## Usage

### Android

On Android the app can be launched with an intent. The app will always return a result.

### Intent

#### de.esders.esdersconnect.DEVICE\_JSON

This intent will read out measurements from the device formatted in JSON (setAction). The following parameters can be set to the intent (putExtra).

Name	Type	Description
read_json	Boolean	True: Get measurement of AGP device
read_json_number	Integer	-1: Get last measurement 0: Get all measurements >0: Get specific measurement (1-n)
read_ngp_json	Boolean	True: Get measurement of NGP device
get_ngp_meas_list	Boolean	True: Get measurement list
read_ngp_meas	String	"selected": Get measurement selected on the device.  Date/Time (Format: yyyyMMdd/HHmmss): Get specific measurement.

## Result

The app will always return with an `Android.App.Result` (`RESULT_OK` or `RESULT_CANCELED`) and with an intent, unless the app is closed using the back button. The result intent, if present, will contain one integer field with the name “resultCode” and a string field named “resultJsonString” which is the JSON-formatted measurement of the device or an error message.

The integer value of “resultCode” can be interpreted as follows (getIntExtra):

Value	Name	Description
0	SUCCESS	Everything is ok and the measurement is transferred.
1	CONNECTION_ERROR	No connection could be established to the device.
2	SEND_DATA_ERROR	An error occurred while sending the measurement.
3	RECEIVE_DATA_ERROR	An error occurred while receiving the measurement.

4	MISSING_DATA	This error occurs, if the intent has no input data (extra map).
5	INVALID_DATA	This error occurs, if the intent has invalid input data.
99	UNKNOWN	This error occurs, if an unknown error occurred.

If no error occurred the string value of “resultJsonString” contains the JSON-formatted measurement of the device. In case of an error, the field contains a JSON-formatted error message (getString-Extra):

Example error message:

```
{
  "ErrorInfo": "Connection failed!"
}
```

## Sample app

The sample app “DeviceJsonApiTest” supports the interface described here. It can be used as a guide for your own implementation. The following link contains both the source code and an APK of the current version.

<https://github.com/EsdersGmbH/DeviceJsonApiTest>

## Revision History

Version	Date	Editor	Changes
1.0	08.12.2025	DS	Initial Version