

DB-Print

Data acquisition and evaluation system



The Peiseler DB-Print is made for acceleration and braking tests and test cycles for automotive. With acoustic signals it provides the one-man-testing for series of braking test drives.

- Compact design, reduced setup-time
- Integrated display and thermo printer
- Imaging of the complete test sequence
- Acquisition of the exact measurement time with integrated realtime clock
- Shows 3 measuring values on integrated display

Description

The DB-Print is a system for data acquisition and evaluation of measurement data on test tracks and allows the immediate evaluation with the software DBSSI-WIN. The program controls the DB-Print over the RS232-connection, achieves the measuring data and stores the data on a notebook/tablet which is installed in the vehicle. The DB-Print is used with a Peiseler 5th wheel or non-contact measuring sensors.



Application

The DB-Print measurement system can be used in several modi. The evidenced measuring data can be printed with the integrated printer in v.t.s.-steps or used with the easy to handle software DBSSI-WIN.

Acceleration test

After testing the following data will be printed:

- **Point of time:**
Date / time
- **Measurement overview:**
Speed at start and end of measurement, driven distance, duration of testing, average speed (calculated by v/t)
- **Measurement window:**
Speed points of before/during/after measuring windows.
Time, distance, acceleration data of before/during/after measuring windows

Braking test

Start and stop of the braking test can be activated in several ways:

- **Manually:**
With the Start/Stop button
- **Automatically:**
With external signal (e.g. grip switch, stop light, optional with brake light switch)
- **Automatically:**
Within a free choosable speed window ($v1/v2$)

After end of braking the following results are printed:

- **Point of time:**
Date / time
- **Measurement overview:**
Speed at start and end of braking, complete distance of braking, complete time, average deceleration (depends on distance of complete measurement - $v^2/2s$)
- **Measurement window:**
Fixed or percental of the speed at braking-start. Speed points of before/during/after measuring window. Time, distance, acceleration data of before/during/after measuring windows. Average deceleration (MFDD) within the speed window ($v1/v2$)

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Acceleration - braking mode

This mode allows a seamless combination of an acceleration and a brake test. Before starting, the acceleration and the braking window is set. After reaching the defined speed (e.g. 100km/h) an acoustic signal is given, the acceleration measuring is closed and the data will be printed. At the same time the DB-Print switches to brake test mode and waits for the start signal for measuring. After stopping the vehicle you have measuring results of acceleration and braking test with only one test drive.

Series of braking

This mode allows the automatic measuring of single results of several brakings in a close sequence (ECE-R13). The DB-Print follows automatically the actions of the driver and provides a complete test series by acoustic signals - so only one man is needed. Before testing the test cycle time, the number of test cycles and the allowed brake time within the test window (v1-v2) is set. On top of the data acquisition following functions are provided by the DB-Print:

- Checking of needed speed before start braking
- Time controlling and chronometer function show the driver the start of next brake test cycle
- Good/Bad message after every single brake cycle for direct control of the measuring

During or else after measurement the following test results are printed:

- Measured time of every single brake cycle
- After every cycle all results as shown under **braking test** (page 1)
- At cycle end a tabular summary of all single and middle results

Calibration mode

In this mode the calibration factor can be set automatically. Therefore the vehicle will be driven on a measured track ($\geq 10\text{m}/33\text{ft}$). The measured calibration factor will be stored.

Setup mode

In this mode you can set all variables of the measuring before testing (e.g. working mode, calibration factor, length of calibration track, etc.)

Remote controlling

With the RS232-connection you can control all functions by ASCII-commands (operation and data acquisition).

Technical data

Inputs:	1 analog input (sensors) 2 switch inputs for light barrier and brake light cable
Storage medium:	SD-card ($\geq 2\text{GB}$)
Dimensions:	22,4 x 14,6 x 5,9 cm (W/L/H)
Display:	20 digits, alpha numeric with backlight
Outputs:	USB, RS232, SD-card
Printer:	Fast thermal printer

Delivery scope

- DB-Print measurement system
- Supply cable, brake light cable, RS232-cable
- USB adapter
- Grip switch
- SD-card 16 GB
- 1 paper roll for printer
- Software DBSSI WIN
- Transport case (46 x 34 x 14 cm)
- calibration certificate

Accessories

- Signal cable Art.Nr. **5002**
- Paper roll Art.Nr. **2917**