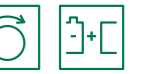


HOPPECKE Batterien GmbH & Co. KG
Bontkirchener Str. 1
D - 59929 Brilon
Tel: +49 (0) 2963 61-0
Fax: +49 (0) 2963 61-449
E-Mail: motivepower@hoppecke.com

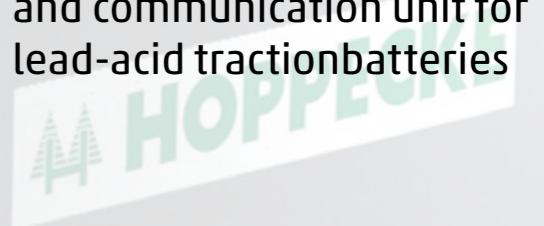


05/2016 All details in this brochure are based on state-of-the-art technology. Our products are subject to constant development. We therefore reserve the right to make changes. All illustrations similar.



trak | collect

Measurement, evaluation
and communication unit for
lead-acid traction batteries



trak | collect

Currently the most intelligent controller on the market

trak | collect is the only measurement, evaluation and communication unit for lead-acid traction batteries in all industrial applications, showing „state of usage“ and „state of readiness“ today. This leads to trak | collect being currently the most intelligent controller on the market.

trak | collect measures the battery status in real time in order to improve operational safety and productivity. It communicates with the surroundings of the battery (e.g. charger, trak | monitor, PC and vehicle) and conveys diagnostic data.

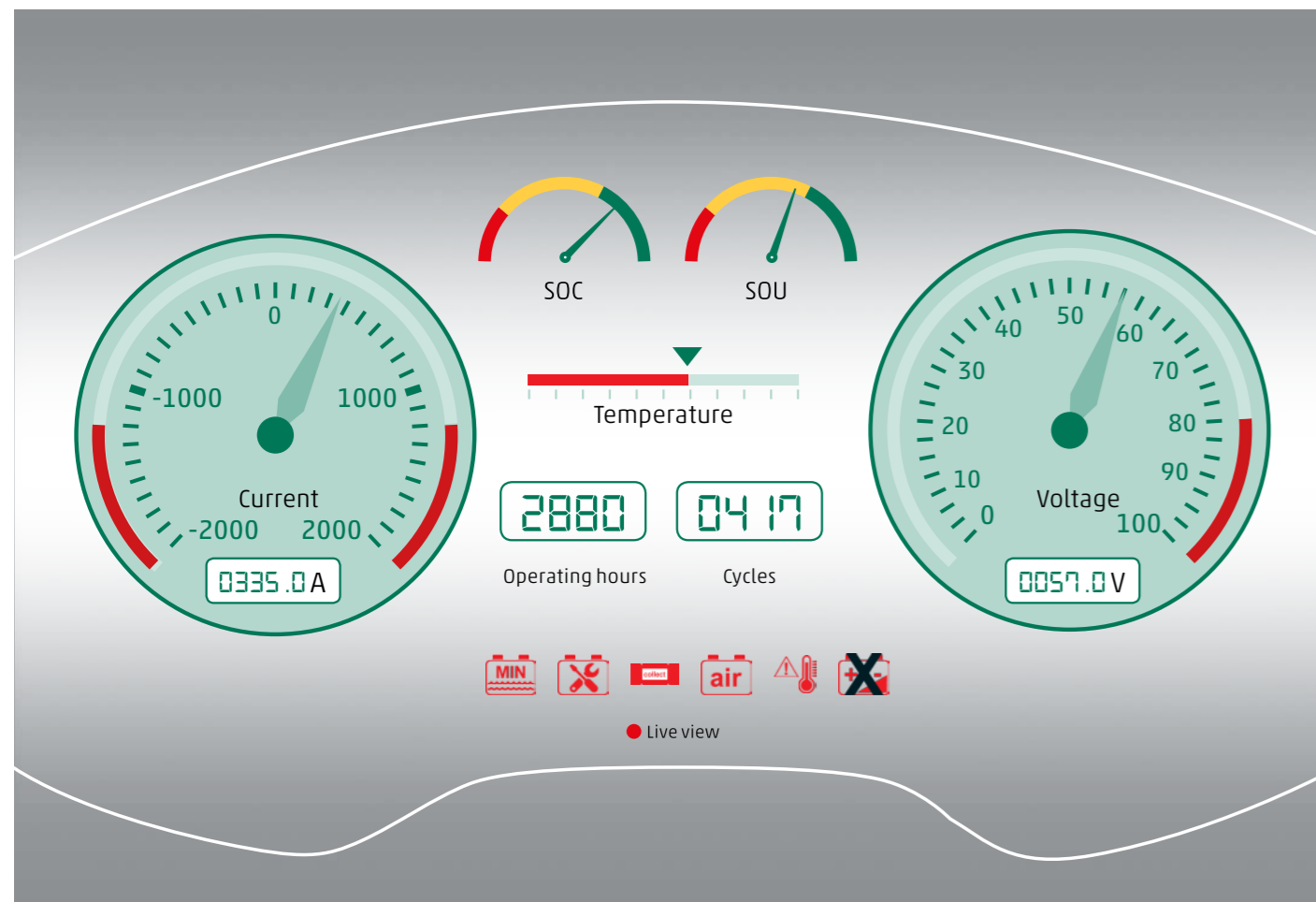
At the connection of the battery, trak | collect checks its operational readiness, similar to the final check at a car's engine start. This diagnosis of the battery helps achieve the professionalization of the battery management and, based on this, also the vehicle fleet management.

trak | collect captures the complete battery voltage, the medium voltage of the battery, the charging and discharge current, the battery temperature and the filling level of the electrolyte level. On this basis, state of charge (SOC), state of usage (SOU), state of readiness (SOR) and current profile are determined as well as charged and discharged ampere- and watt-hours.

trak | collect saves data concerning the battery for local reporting or transfers these to a central remote-monitoring system for the planning and efficient control of logistic processes and, in doing so, contributes to an improved economic efficiency.

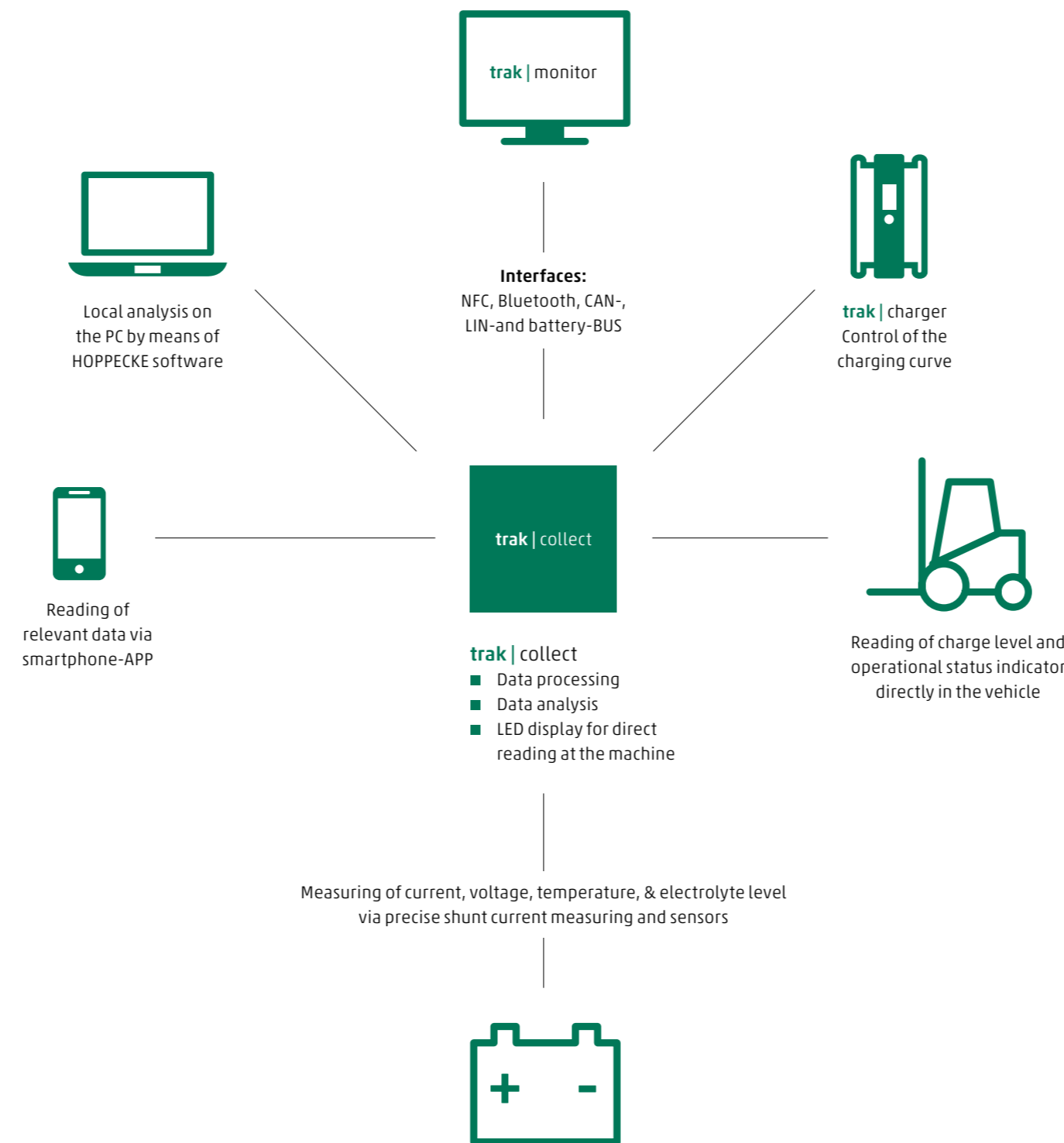
trak | collect creates with the aid of a software reports about:

- Cycle runs of all relevant values
- Graphic courses of state of charge, voltage, Ah flow rate, etc.
- Chronological listing of all exceptional results
- Summary of the individual data in fleet reports



trak | collect

High connectivity and flexible fields of application



Your advantage with HOPPECKE

From the local display to remote monitoring, where fleet and location data can be brought together, the possible applications of trak | collect are extremely flexible. Up to five communications interfaces are usable.

trak | collect can be installed easily on all PzS / PzB batteries - also later on-site. trak | collect remains permanently on the battery to be able to save and evaluate all the data from the entire battery life.

- Improved investment protection
- Increased transparency and professionalism in the area of the battery management
- Exact planning of new investments
- Improved operational safety and productivity
- Flexibility
- Possibility to improve efficiency & effectiveness
- Improved vehicle availability

For operators of renting fleets

- **Investment protection**
Identification of the rented battery for the pool control and for the correct charging of the different battery types
- **Indications for wrong treatment**
(e. g. deep discharge, intensive use and temperature warning)
- **Deployment analysis**
Statements about state of usage and state of health
- **Maintenance instructions**
anticipatory maintenance for an improved investment protection
- **Details about remaining value**
Allows an evaluation of the investment item „battery“

For operators of battery pools

- **Indications for wrong treatment**
(e. g. an improper use) In this case, potential training requirements become visible
- **Deployment analysis and planning**
Statements about state of usage and state of health
- **Maintenance instructions**
anticipatory maintenance for an improved operational safety
- **Statements about asset's residual value**
Anticipatory planning of replacement batteries

For vehicle manufactures (OEM)

- **Automatic Identification of the battery**
(for the correct charging) Leads to an improved investment protection for battery and vehicle
- **Indications for wrong treatment**
(e. g. rise in temperature)
- **Maintenance instructions**
anticipatory maintenance for an improved investment protection & offering of an additional benefit at the sale of industrial trucks
- **Details about remaining driving time**
Optimisation of the drive mode
- **Used kWh / Ah**
Provides a load profile for the vehicle