### KMS-2012



Capacity measurement system for checking Li-Ion, Ni-MH, Ni-Cd and lead batteries



In production, power tool batteries are quite often sorted out as being "defective" although these batteries still possess more than 80% of their original capacity.

Previously, these batteries were often replaced untested with new batteries. The unnecessary costs and unnecessary environmental burden due to this practice are frequently neglected. Here there are test methods that pay off even after a very short time. The capacity meter KMS-2012 was developed to test the capacity of power tool batteries. The unit was designed so that it fulfills the requirements of modern battery technology.

Li-lon batteries with voltages from 4.2 V - 50.4 V [nominal voltage 3.6 V - 43.2 V] and current up to 40 A are testable.

With its wide measurement range, the new KMS-2012 offers the optimal solution for testing power tool batteries from all well-known manufacturers.

During a battery test, a fully-charged battery is discharged purposefully. Here the KMS-2012 simulates a consumer, e.g. a cordless screwdriver and, in parallel to this, measures the battery's capacity, power and internal resistance. The precision of the measurement of better than 0.1% with respect to

the upper range value is unique.

After the measurement, the KMS-2012 automatically evaluates from the data collected whether or not the battery is still suitable for production. The limits are freely selectable.

This way countless batteries that are incorrectly sorted out as defective are put back into the production process. If you calculate out the costs for the batteries that can be put back into production, the KMS-2012 usually pays off within a few months.





# KMS-2012

Capacity measurement system for checking Li-Ion, Ni-MH, Ni-Cd and lead batteries

- Reverse polarity protection
- Test boxes available for all common battery types Connections via 4mm sense and 2mm laboratory sockets
- Final discharge voltage can be selected
- Precision +/- 0.1%
- Batteries up to 50.4 V are testable

Test boxes

- Parameters can be selected at will Current [A], Voltage [V], Time [s]
- Documentation exportable
  via USB
- Discharge voltage: 10 mA - 40 A
- Production suitability test
- Cost savings through reduction of the needless battery replacement
- Operation via mouse and keyboard possible\*
- 8.4" TFT touch panel

\* Mouse and keyboard are not included in scope of devilery

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#### **Technical Data**

Model	KMS-2012
Input	90 – 260 V AC, 50 – 60 Hz, 75 VA
Measurement input	0 - 50.4 V
Max. power	50.4 V / I max. 40 A, P max. 960 Watt
Measurement range	10 mA up to 40 A stepless adjustable
Interfaces	Front: 2x USB Back: 4x USB, 2x Network, 2x serial, 1x DVI-I, 2x PS/2
Weight	18.1 kg
Dimensions (W x H x D) in mm	445 x 240 x 370
Tested	DIN EN 60990 / EN 55022

Test boxes for Li-lon battery packs	Order-no.
HST and Makita sliding battery Type BH 9.6 V - 24.0 V Ni-MH Type BL 14.4 V, 18.0 V, 36 V Li-Ion HST-PR 14.4 V, 18.0 V Li-Ion	KMS-BOX-BH-PR
Bosch 10.8 V Li-Ion insertion battery	KMS-BOX-BO-10**
Bosch 14.4 V & 18.0 V Li-Ion	KMS-BOX-BO-LI
Atlas Copco, Dessouter, Chicago Pneumagtics 18.0 V, 30.0 V & 36.0 V Li-lon	KMS-BOX-CPN
Cooper Power Tools Cleco 26.0 V & 44.0 V Li-Ion & AC System 3000 9.6 V - 18.0 V Ni-Cd & Ni-MH	KMS-BOX-CPT
Fein 10.8 V - 28.8 V Li-Ion	KMS-BOX-FEIN
Panasonic 10.8 V - 28.8 V Li-Ion	KMS-BOX-PA-LI
Makita, Bosch, HST, Gesipa insertion battery 9.6 V - 24.0 V Ni-Cd and Ni-MH Gesipa 14.4 V Li-Ion	KMS-BOX-UNI**

More test boxes on request.

\*\* ATTENTION: Contacts are only suitable for 20A.

## KMS-2012-SOFT

Software for the KMS-2012



The test parameters can be set and the results of the measurement read using the 8.4" TFT touch display. It is even possible to display a graphic evaluation on the screen.

Using two USB ports or one serial RS232 interface, measurement data from the KMS-2012 can be transmitted directly to a computer or saved on a USB stick. This way, it is possible to document measurement results and analyze them later.

Of course the KMS-2012 can be operated and programmed using a mouse and keyboard.

Software updates are handled quickly and easily using the USB interface.

The large 4 gigabyte memory offers sufficient space to store programs for the power tool battery used in the KMS-2012 so that only the right program must be selected and the right test box connected for testing.



HST-UM2 - Switch-box for KMS-2012 - voltage range 1,2 V - 35 V



#### 4 batteries at the same time

With the switch-box (HST-UM2) in combination with the KMS-2012 you can check up to four different batteries of different manufacturers at the same time.

Also the different voltages and capacities will be detected and respective tested.

Img. incl. KMS-2012