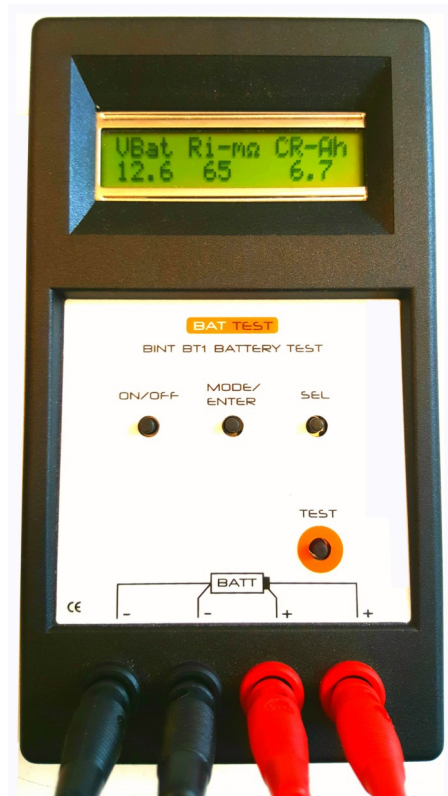


BINT BAT TEST BT1 - BATTERY TESTER

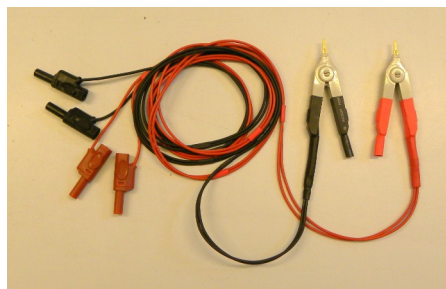
PORTABLE DIGITAL METER TO TEST BATTERY EFFICIENCY



MEASUREMENTS OF
VOLTAGE - INTERNAL RESISTANCE
RESIDUAL CAPACITY

MEASURES THE VOLTAGE
OF BATTERIES UP TO 60V - 20 Ah

Kelvin Cable KB7
Cable L = 70 cm
Crocodile clips open wide max 7 mm



Kelvin Cable KB32
Cable L = 100 cm
Crocodile clips open wide max 32 mm



The new **BAT TEST BT1** is an innovative design tool for testing the state of the batteries, for immediate checks in the field on UPS, stationary systems for safety and emergency power supply, mobility batteries (electric motorcycles and bicycles), forklifts, anti-theft and fire control units, telecommunications and in general for the control of all types of batteries in the industrial, transport, maintenance and laboratory sectors.

The ease of use, the accuracy of the reading, the immediacy in the response and the protection against errors of use make it the tool fundamental in every sector of use where rechargeable batteries are used.

It allows the simultaneous measurement of Voltage V - Internal Resistance $m\Omega$ - Residual Capacity Ah (only for lead batteries): the measurements are visualized by means of a 16x2 LCD display for a reliable, simple and immediate reading of the battery status under test.

Measures batteries from 1.2Vdc up to 60Vdc, from <0.25 Ah up to > 20 Ah, with selection on four types of batteries:

- Lead Pb
- NiCd nickel cadmium
- NiMH nickel metal hydride
- All battery: all other types of batteries (alkaline, carbon, lithium, etc)

The new **BAT TEST BT1** provides the information necessary to determine the ability to produce energy and maintain the state of battery charging, the suitability to support the charge / discharge cycles as well as the aging state of the internal elements. Since the performance of the battery data can be observed, the status of the batteries can be accurately determined.

The instrument allows to carry out the tests without having to disconnect the elements of the battery pack and without having to disconnect the battery from the charging circuit.

The measurements are carried out with a four-terminal Kelvin measurement technique which allows accurate measurements to be obtained, relief of the measurement of the dynamic resistance of the battery with impulsive method with high immunity to possible network disturbances, both a 50 Hz than 60 Hz.

The instrument is powered by alkaline AA type batteries, with a long autonomy of operation; it is also possible to power the appliance with an supplied external charger.

The device is equipped with internal protection against reverse polarit  and against measurements on a battery with too much voltage high (above 60 Vdc).

The **BAT TEST BT1** is supplied complete with Kelvin type measuring cables with crocodile clips and carrying case, it is possible to choose between two types of Kelvin cables according to the type of batteries to be measured.

TECHNICAL CHARACTERISTICS - BINT BAT TEST BT1

"V" VOLTAGE MEASUREMENT

1.2 - 60 Vdc - Resolution 10 mV - minimum measurable voltage about 1.2V (one Ni-Cd element)

"Ri" INTERNAL RESISTANCE MEASUREMENT

from 1 mΩ to 20 Ω in two automatic courses with 2 Ω and 20 Ω of internal resistance f.s.

RESIDUAL CAPACITY - only for lead acid batteries

from <0,25 Ah to >20 Ah

BATTERY TYPE	POSSIBLE MEASURES		
Pb - Lead	V - Voltage	Ri - Internal Resistance *	CR - Residual Capacity *
NiCd - Nickel Cadmium	V - Voltage	Ri - Internal Resistance *	
NiMH - Nickel Metal Hydride	V - Voltage	Ri - Internal Resistance *	
Other batteries	V - Voltage	Ri - Internal Resistance *	

ACCURACY VOLTAGE MEASUREMENTS

+/- 2 % +/- 1 digit (from 10°C to 40°C)

ACCURACY INTERNAL RESISTANCE MEASUREMENTS *

+/- 4 % +/- 1 digit (from 10°C to 40°C) - * measurements influenced by environment temperature

ACCURACY RESIDUAL CAPACITY * - only for lead acid batteries

+/- 20 % depending on the type of battery - * measurements influenced by environment temperature

The acceptance and rejection threshold varies according to the manufacture, type and capacity of the batteries. The internal resistance and terminal voltage of a new or good battery need to be measured in advance to obtain valid comparative measurements between new and used batteries.

The changes in the internal resistance of open (liquid) lead acid batteries and alkaline batteries are less than those of sealed lead acid batteries (valve regulated lead acid (VRLA) batteries such as the MSE and HSE series, so it may be difficult to determine the deterioration state of these batteries.

Since the internal resistance of sealed lead acid batteries tends to increase sharply as deterioration progresses (1.5 to 2 fold increase from the initial value), the state of the batteries can be determined by monitoring the trends in the data.

DISPLAY

by means of dot matrix LCD 16x2 display, alphanumerical indication:

- battery voltage in Vdc
- battery internal resistance in mΩ
- battery residual capacity in Ah (only for lead batteries)

POWER SUPPLY

4 x 1,5V alkaline batteries (AA size) or with supplied external charger

BATTERY LIFE

over 100 hours

INTERNAL PROTECTION

+/- 60 Vdc max for 2 sec

DIMENSION

180 x 100 x 45 mm

WEIGHT

0,450 kg

SUPPLIED ACCESSORIES Case - Instruction Manual

- **Bat Test BT1-KB7** four terminal Kelvin test cables with crocodile clips, open wide 7 mm - cable length 70 cm
- **Bat Test BT1-KB32** four terminal Kelvin test cables with crocodile clips, open wide 32 mm - cable length 160 cm
- CH1 External charger