

# METRAHIT | H+E CAR



## E-Mobility



## Testing of High Voltage Safety

of hybrid and electric vehicles according to UN ECE R100

# E-Mobility

## Electric Safety Requirements according to UN ECE R100

UN ECE R100 – Regulation No. 100 of the Economic Commission for Europe of the United Nations: Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train.

This regulation defines the safety requirements for vehicles with electric power train during operation, uncoupled from a charging station, and is decisive for the testing of high voltage safety.

ECE R100 is the valid regulation for the type approval testing of vehicles with high voltage systems in Europe and those countries which have signed this regulation.

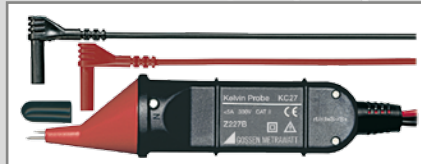
The all-in-one device METRAHIT H+E CAR allows for testing the electric safety in conformance with UN ECE R100. It unites three functions in one device: multimeter, milliohmeter for checking ground connection and insulation tester for measuring insulation resistance.

### Features of METRAHIT H+E CAR:

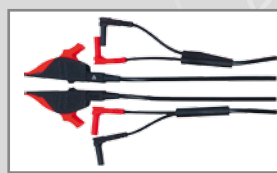
- ▶ Milliohmeter: 0.001 mΩ ... 30.000 Ω @ 200 mA and 1 A / 4-wire measurement with Kelvin probes
- ▶ Insulation tester: 0.01 MΩ ... 3.000G Ω @ 50 V, 100 V, 250 V, 500 V
- ▶ Digital high precision multimeter (±30000 digits):  
Voltage DC / AC, connection, continuity and diode test, insulation resistance, resistance, frequency, temperature
- ▶ Data logger: integrated DATA Hold memory for more than 1200 measured values
- ▶ IR interface for transmission to a PC (USB-Hit adapter is optionally required)
- ▶ Standards: CE, CAT II 600V, including D-K-15080-01-01 (DAkKS) calibration certificate

### Scope of Delivery – Basic Unit:

- ▶ Protective rubber holster, orange
- ▶ 3 rechargeable NiMH batteries (AA)
- ▶ NA HIT 27 charger
- ▶ Operating instructions in German/English/French
- ▶ DAkKS calibration certificate



Kelvin Probes KC27



Kelvin Clips KC4

### Additionally included with the H+E CAR-Set:

- ▶ Hybrid test case kit, orange, with test probes
- ▶ Measuring cables
- ▶ Kelvin clips



METRAHIT H+E CAR-Set

### Optional Accessories:

- ▶ Hybrid test case kit
- ▶ Automotive diagnostics case
- ▶ Measuring cables and probes, etc.
- ▶ METRAWIN 10:  
Windows software for reading out the integrated memory, graphic display and data export function

Type	Article No.
METRAHIT H+E CAR	M227T
METRAHIT H+E CAR-Set	M227U
KELVIN CLIPS KC4 (optional)	Z227A
KELVIN PROBES KC27(optional)	Z227B



### GMC-I Messtechnik GmbH

Südwestpark 15 ■ 90449 Nürnberg ■ Germany  
Phone: +49 911 8602-111 ■ Fax: +49 911 8602-777  
www.gossenmetrawatt.com ■ info@gossenmetrawatt.com

