

# DIGITAL EARTH TESTER

## KEW 4105DL / 4105DL-H / 4105DLBT-H

# IP67 DUST & WATER-PROOF RUGGED EARTH TESTERS

- 3pole and 2pole Earth Resistance measurement (0.01Ω-2000Ω)
- Waterproof design
- Bluetooth® enabled for data transfer(4105DLBT-H)
- Noise rejection up to 25V rms allows accurate testing in noisy environments
- Rotary Switch makes the user interface very intuitive
- Large LCD Display with Backlight
- LED to monitor correct / non correct auxiliary earth spike resistance
- Earth Voltage Measurement (AC / DC 0-300V)
- CAT IV 100V



**KEW Smart**  
Advanced



GET IT ON  
**Google Play**

Download from Google Play Store for FREE.

Download on the  
**App Store**

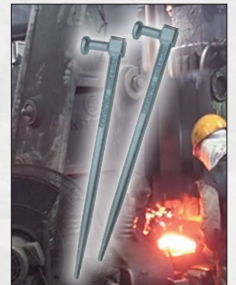
Download from App Store for FREE.



**Dust and waterproof:**  
after use you can wash it to  
remove the mud and dust



**Innovative Cable reel with  
wire guide system to  
facilitate rewinding**



**Robust forged  
earth spikes**

## ● KEW 4105DL / 4105DL-H / 4105DLBT-H Specifications

Earth resistance measurement	20Ω	200Ω	2000Ω
Measuring range	0.00 - 2000Ω		
Display range	0.00 - 20.99Ω	0.0 - 209.9Ω	0 - 2099Ω
Accuracy <sup>*1</sup>	±1.5%rdg±0.08Ω <sup>*2</sup> ±1.5%rdg±4dgt		
Auxiliary earth resistance <sup>*3</sup>	<10kΩ	<50kΩ	<100kΩ
Comparator reference value	10Ω	100Ω	500Ω
Earth voltage measurement			
Measuring range	0.0 - 300.0V AC (45 - 65Hz) / ±0.0 - ±300.0V DC		
Display range	0.0 - 314.9V(AC) / 0.0 - ±314.9V(DC)		
Accuracy	±1%rdg±4dgt		
Applicable Standards			
	IEC 61010-1 CAT IV 100V / CAT III 150V / CAT II 300V Pollution degree 3 IEC 61010-2-030, IEC 61010-031, IEC 61557-1, 5 IEC 60529 IP67, IEC 61326-1, 2-2 (EMC), EN50581 (RoHS)		
Power source	LR6 (AA)(1.5V)×6		
Dimensions	121(L)×188(W)×59(H) mm (including case lid)		
Weight	Approx. 690g (including batteries and case lid)		

<sup>\*1</sup> For precision measurement, auxiliary earth resistance should be 100Ω ±5% or less.

<sup>\*2</sup> At simplified measurement add ±0.10Ω to the specified accuracy.

<sup>\*3</sup> Accuracy within the auxiliary earth resistance: ±5%rdg±10dgt.

\* Bluetooth® is the trademark or registered trademark of Bluetooth SIG.

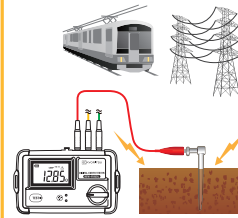


## ● Selection Guide

	4105DL	4105DL-H	4105DLBT-H
Bluetooth® communication	—	—	✓
Included Accessories (●), Optional Accessories (△)			
①7127B Simplified measurement probe	●	●	●
②8041 Auxiliary earth spikes [2 spikes/1 set]	●	●	●
③9121 Shoulder strap	●	●	●
④7266 Earth resistance test leads (red:20m, yellow:10m, green:5m)	△	●	●
⑤7267 Cable reel for Earth resistance tester (red:20m)	●	△*	△*
⑥7268 Cable reel for Earth resistance tester (yellow:10m)	●	△*	△*
⑦7271 Cable reel for Earth resistance tester (green:5m)	●	△	△
⑧9190 Carrying case	●	△	△
⑨9191 Hard case	△	●	—
⑩9197 Hard case	—	—	●
⑪7269 Earth resistance test lead (red:20m)	△	△	△
⑫7270 Earth resistance test lead (yellow:10m)	△	△	△
⑬8259 Adapter for measurement terminal [red, yellow, green/1 set]	△	△	△

\* The cord reel itself cannot be stored in the hard case.

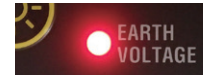
### Strong noise rejection!



Noise rejection up to 25V rms allows accurate testing in noisy environments.

### Earth voltage warning

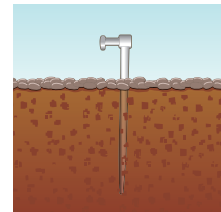
A red LED comes on if an external voltage is detected.



[ LED light comes on if: ]

Frequency	Voltage
0 - 10Hz	> 10V
10 - 100Hz	> 25V
100 - 400Hz	> 5V

### Robust steel made earth spikes



Earth measurements are possible up to 100kΩ\* of auxiliary earth spikes resistance.

\* 20Ω range 10kΩ, 200Ω range 50kΩ, 2000Ω range 100kΩ.

### Auxiliary earth resistance check

If the auxiliary earth resistance is:

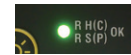
Too high at S(P) terminal



Too high at H(C) terminal



Within allowable range (Green LED OK)



## ● Included / Optional Accessories



**! Safety Warnings :** Please read the "Safety Warnings" in the instruction manual supplied with the instrument thoroughly and completely for correct use. Failure to follow the safety rules can cause fire, trouble, electrical shock, etc. Therefore, make sure to operate the instrument on a correct power supply and voltage rating marked on each instrument.

**COSINUS Messtechnik – Ihr Partner für Messlösungen  
in allen elektrischen und physikalischen Anwendungen.**

**COSINUS Messtechnik GmbH**

Rotwandweg 4

82024 Taufkirchen

Tel.: 089 / 66 55 94 - 0

Fax: 089 / 66 55 94 - 30

[office@cosinus.de](mailto:office@cosinus.de)  
[www.cosinus.de](http://www.cosinus.de)