

# IT - 1000 - Plus INSULATION AND CONTINUITY TESTER



- Insulation at 250 / 500 / 1 000 V
- Insulation resistance up to 11 GΩ
- Manual, locked and timer modes
- AC and AC+DC voltage measurement up to 700 V
- Continuity at 200 mA
- Visual alarm, blue / red backlighting

**IP  
40****600 V  
CAT IV****IEC  
61557***Measure up* **STEK**

## ERGONOMICS

**IT-1000 PLUS** insulation and continuity tester is designed for use in the field: lightweight, compact, rugged and easy to handle, even when wearing gloves. Its ergonomics is intended to simplify its use:

- ▶ **Double digital display** to view the insulation value and real test voltage simultaneously in an easy-to-read format
- ▶ **2-colour backlighting**
- ▶ **Shockproof sheath** for excellent handling
- ▶ Stand for stability when used on a **horizontal surface**
- ▶ **Bag** with built-in neck strap for hands-free use and to stow your measurement accessories
- ▶ **Automatic power-off function** to optimize the battery life
- ▶ **Programmable alarm thresholds** to view the test result instantaneously



Bag for hands-free use.

**HOLD:** automatic freezing of the display at the end of each measurement

**TEST** start

7-position switch for **direct access to the functions**



**Backlit LCD screen**, double digital display: insulation value and real voltage

**4 keys for access to the functions:** HOLD, backlighting, compensation of cable resistance, buzzer, timer, etc.

Measurement terminals

# FUNCTIONS AND APPLICATIONS

## Safety

The CA 6528 is a safe instrument. The presence of a hazardous voltage is detected automatically. Insulation measurement in the presence of a voltage greater than 30 V is automatically inhibited, making insulation testing impossible.

## Measurements

**IT-1000 PLUS** insulation tester can measure insulation at 250 V / 500 V / 1,000 V, making it ideal for a large number of applications. It offers high-performance insulation resistance measurements up to 11 G $\Omega$ , while also measuring resistance up to 420 k $\Omega$  and voltage up to 700 VAC/DC. In compliance with the applicable standards, continuity measurement is performed with a test current  $\geq 200$  mA. This measurement directly integrates automatic compensation of cable resistance for greater accuracy.



Control of an electrical cabinet

## Applications

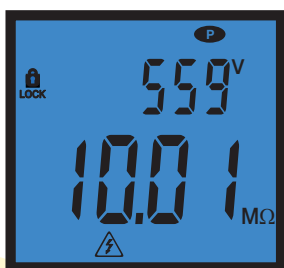
The CA 6528 is mainly used to check the safety of electrical installations. It measures resistance, insulation and continuity in compliance with the applicable standards: IEC 60364, NF C 15-100, VDE 100, etc. It is also ideal for maintenance and repair of electrical equipment such as motors, cables, etc.



Preventive maintenance on a motor

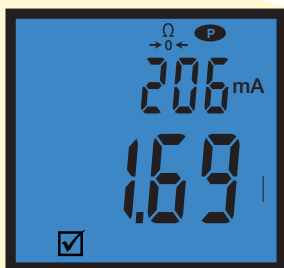
## Preventive maintenance

" In addition to the measurements carried out on new and reconditioned equipment during commissioning, regular insulation testing on installations and equipment helps to avoid such incidents through preventive maintenance. These tests detect ageing and premature deterioration of the insulating properties before they reach a level likely to cause problems. The severity of such incidents may affect the safety of people and property, as well as generating production downtime costs in industry. "

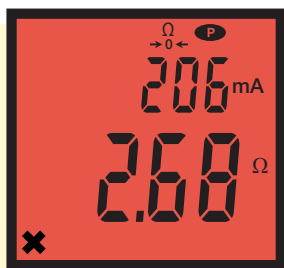


Insulation measurement in manual or locked mode or with a duration programmed using the timer

**Insulation measurement with simultaneous display of the insulation and the real test voltage**



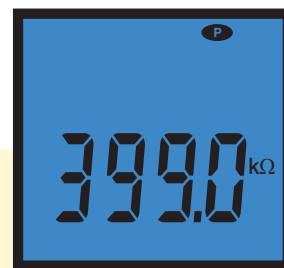
Continuity measurement at 200 mA with measurement  $< 2 \Omega$   
Blue screen and



Continuity measurement at 200 mA with measurement  $> 2 \Omega$   
Red screen and



Voltage measurement  
**> battery charge test in the voltage position**



Resistance measurement

> the blue or red backlighting is used to indicate the alarm status immediately

# TECHNICAL SPECIFICATIONS

## IT 1000 PLUS

### Industrial maintenance

#### Voltage

Measurement range/ resolution	1-700 V / 1 V
Accuracy / input impedance	$\pm 1.2\% R \pm 1ct$ for AC+DC; $\pm 1 R \pm 1ct$ for DC / 25 M $\Omega$
Operating frequency	DC; 30-440 Hz

#### Insulation

Test voltage	250-500-1,000 V
Range at maximum test voltage	11 G $\Omega$
Compliance with the IEC 61557-2 standard	2 G $\Omega$
Measurement range	
250 V	50 k $\Omega$ - 4.2 G $\Omega$
500 V	100 k $\Omega$ - 4.2 G $\Omega$
1 000 V	200 k $\Omega$ - 11 G $\Omega$
Measurement range / resolution	50 k $\Omega$ - 3.999 / 1 k $\Omega$ ; (0.2)* 3.6-39.99 M $\Omega$ / 10 k $\Omega$ ; 36-399.9 M $\Omega$ / 100 k $\Omega$ ; 360-4,200 M $\Omega$ / 1 M $\Omega$ ; (1 kV) 3.6 - 11.00 G $\Omega$ / 10 M $\Omega$
Accuracy	0.05-399.9 M $\Omega$ : $\pm 1.5 R \pm 10cts$ ; 360 -4,200 M $\Omega$ : $\pm 4 R \pm 10cts$ ; $\pm 4 R \pm 5cts$ (at 1,000 V); 3.6-11 G $\Omega$ : $\pm 10 R \pm 10cts$
Test voltage (I <1 mA)	0%+20%
Timer (min:s)	10s to 39min 59s
Alarms	1 threshold / test voltage

#### Continuity

Measurement range	0.02 $\Omega$ - 40 $\Omega$ (200 mA)
Accuracy / open-circuit voltage	$\pm 1.2\% R \pm 3cts$ / 6 VDC < U < 9 VDC
Measurement current	$\geq 200$ mA (up to 2 $\Omega$ )
Continuity threshold (fast beep)	2 $\Omega$ / 1 $\Omega$
Cable compensation	up to 5 $\Omega$

#### Resistance

Measurement range / resolution	1 -399.9 $\Omega$ / 0.1 $\Omega$ ; 360-3,999 $\Omega$ / 1 $\Omega$ ; 3.60-39.99 k $\Omega$ / 10 $\Omega$ ; 36.0-420.0 k $\Omega$ / 100 $\Omega$
Accuracy	$\pm 1.2\% R \pm 3cts$

#### General specifications

Display	2 x 4,000 cts
Power supply / Automatic power-off	6 x LR6 or AA batteries / 10 min deactivatable
Battery life	1,000 measurements: at 1 M $\Omega$ @ 1 kV (5 s ON / 25 s OFF); >3,000 continuity measurements (5 s ON / 25 s OFF) at 1 $\Omega$
Dimensions / weight / IP rating	218 x 95 x 63 mm / 760 g / IP 40
EMC / electrical safety	IEC 61326-1 / IEC 61010-1, IEC 61010-2-030 and IEC 61010-2-034 / 600V CAT IV
Compliance with standards	IEC 61557 parties 1, 2, 4 and 10

\*at 1,000 V

### STATE AT DELIVER

#### IT-1000 PLUS

insulation tester delivered in a hands-free bag containing:

2 safety leads, 1 red and 1 black	6 x LR6 or AA batteries
1 red crocodile clip	1 safety datasheet
1 black test probe	1 quick start guide
1 protective sheath mounted on the instrument	1 verification certificate

### ACCESSORIES AND REPLACEMENT PARTS

