



GENERAL

The security voltmeter **VNAC3K-IEC** in addition to measuring voltages up to 1500Vac/2000Vdc, allows also to detect dangerous voltages.

Ignition and mode selection is done with a single touch button on the front of the apparatus.

Dangerous voltages are clearly indicated by a red LED on the front and a logo on the screen.

2 measurement modes:

- Traditional voltmeter mode : high impedance input.
- Security voltmeter mode **3K** : low impedance input.

ditional voltmeter mode : high impedance input

The security voltmeter **VNAC3K-IEC** allows to measure voltages up to 1500Vac/2000Vdc.

These measurements are performed safely, thanks to its design according to EN-61010 2010.

It allows the measurement of alternative components TRMS (True Root Min Square), high impedance mode. It also displays the DC component.

Security voltmeter mode 3K : low impedance input


The security voltmeter **VNAC3K-IEC** permits to measure voltages up to 500Vdc in 3K mode.

It allows you to control dangerous potential for staff in the environment of the smelters.

This apparatus indicates the presence of "hard voltage" dangerous, or "soft voltages" in this case, the load (3K Ω) drops the voltage.

Load (3K Ω) simulates the human body.

CHARACTERISTICS

Auto range :	20-200-2000 Vdc 15-150-1500 Vac TRMS
Accuracy::	> 0,5 % ±1 Pt.
Stability:	30 ppm/°C
Insulation:	>10kV
Temperature range:	-15 à 45°C
Calibration temperature:	20 à 25°C
Casing:	Case ULV0 Weight: 1,120Kg dimensions: 140x80x175mm (LxHxP) connections: HT connector 10KV insulation
Power supply:	NIMH battery Autonomy in standard used: 20 days Continuous used : 10 h Auto power off : 15 mn
No continuous magnetic field influence:	Up to 150 Gauss in X, Y, Z dimensions.
Front panel:	On/Off without contact Hazardous indicator for voltage level > 33V  Screen (see description below)
Accessories delivered with the voltmeter:	Battery charger 230/115Vac
Battery:	Voltage: 7,2V Current: 2Ah Reference: AAx6 Manufacturer : RS Pro
Humidity :	95 % à 30 °C 75 % à 40 °C 45 % à 45 °C
Safety :	Complies with ANSI/ISA 82.02.01 (61010-1) 2004, CAN/CSA-C22.2 No 61010-1-04, UL 61010-1 (2004) and IEC 61010-1 2 nd edition for measurement category III, 2000VDC maximum, pollution degree 3, CEM EN61326-1.

USE

Power up



← Wait for the progress bar

Mode



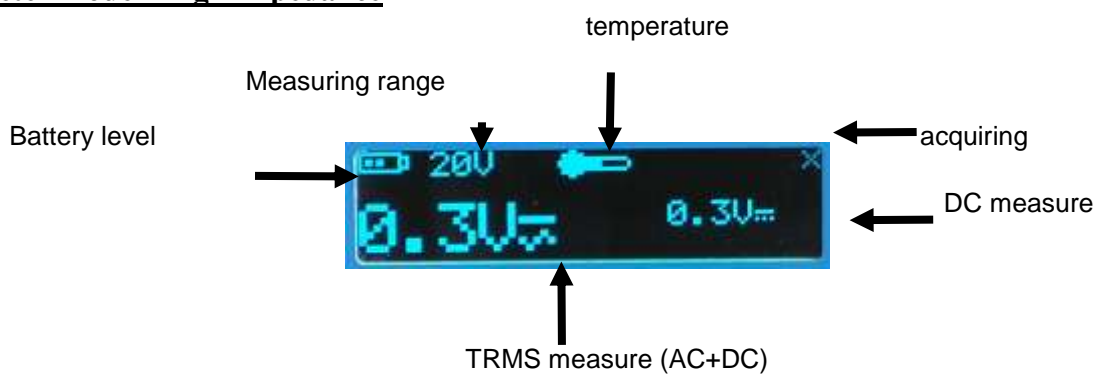
← Touch
-short to change mode.
-long to power off.

Dangerous voltage signaling

Dangerous voltage LED



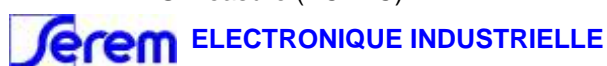
Voltmeter mode – high impedance

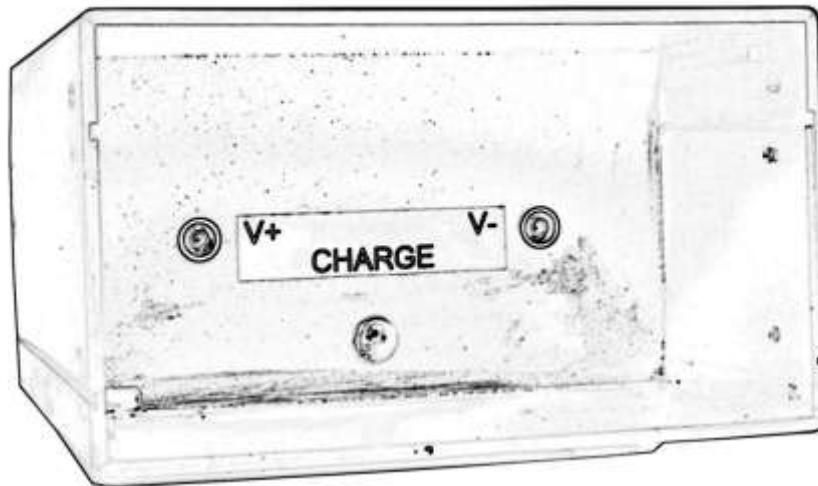


3K mode – low impedance



← TRMS measure (AC+DC)



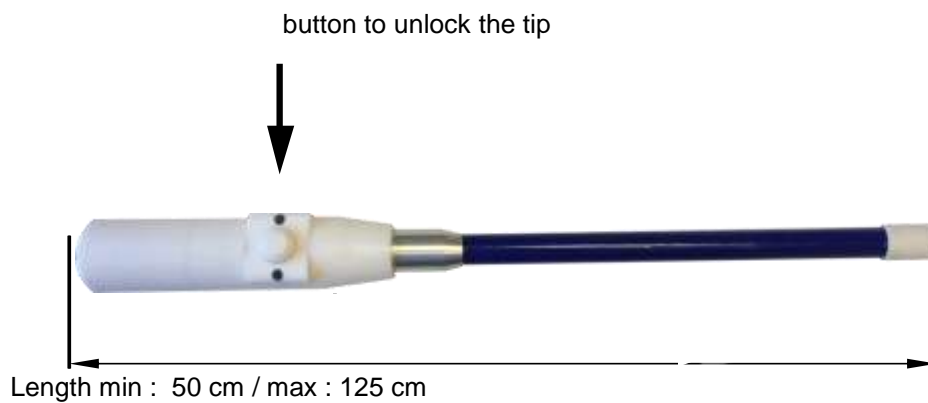
CONNECTIONS:

V+	Positive plug connector.
V-	Negative plug connector.
Charge	Charger plug.

Available accessories for VNAC3K-IEC:

Reference	Description
CHT3015-IEC	2 High Voltage Canes, length 1m, HV 10KV, Positive wire 1.5 m + Negative wire 3.0m., in accordance with IEC-61010
CHTP15-IEC	1 High voltage cane, length 1m, HV 5KV, Positive wire 1.5 m, in accordance with IEC-61010
CHTN30-IEC	1 High voltage cane, length 1m, HV 5KV, Negative wire 3.0 m, in accordance with IEC-61010

Different lengths available on request.

**USE OF CANES**

Place the negative pole first.
Then place the positive pole:

- Push the button.
- Push the cane in order to get the tip to make contact

Read the measure that appears on the screen of the VNAC3K-IEC.

PRECAUTIONS FOR USE

The apparatus should be checked before and after each measurement.

No maintenance is required; the equipment must not be disassembled

The apparatus must not be used while charging.

The apparatus must not be used in the presence of explosive gases or steam, as if sparks, there could be a risk of explosion.

To use the apparatus safely, 2 poles measured must be absolutely unattainable by any person. The user must remain away from any part in contact with the negative pole, if the internal impedance of the equipment is too low; it allows the transmission of dangerous voltages.

The device is designed to make measurements up to 2000VDC (1500VAC) and belongs to the measurement category III. It is strictly forbidden to make voltage measurements in a category higher than III.

If the use of the device intensive in the 3K mode, a message could appear on the screen indicating that it is overheating. In this case, several minutes are needed to cool down.

In case of short circuit, the NIMH battery may explode or release toxic gas.

If the apparatus is used in a manner other than specified, the operator safety can be compromised.







The wires are red color. When they wear out, the red color disappears and gives way to white which means that the insulation is not guaranteed anymore. They must not be used any longer. In this case please contact immediately SEREM.

This apparatus must be used on dangerous voltage only by qualified personal.

Authorized equipment to guarantee the norm IEC 61010:

- CHT3015-IEC
- CHT30-IEC
- CHT15-IEC

SYMBOL

	Dangerous voltage.
	Important information, refer to the manual.
CAT III	MEASUREMENT CATEGORY III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage MAINS installation. This part of the installation is expected to have a minimum of two levels of over-current protective devices between the transformer and possible connecting points
	Double insulation.
	Do not dispose of this product as unsorted household waste. Look for information on recycling.
	The apparatus must be used only within.
CE	The product is manufactured in Europe, meets the requirements of the European Union safety, health and environmental protection.
	Apparatus potentially hot.

In case of equipment renewal, please contact SEREM:

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