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|  REMO-HSE | HV-Voltmeter 210S | Datasheet |
| | High Voltage Voltmeter | |



- 4 ½ digit LCD display with automatic polarity indication
- Spark sensing with LED indicator
- Temperature indication
- Analogue signal outputs for voltage, ripple and sparks recording
- Supply voltage either 115 or 230VAC $\pm 10\%$ and 50/60Hz or 24VDC $\pm 10\%$

Options:

- Extension adapter for the spatial separation of measuring instrument and high voltage probe



Description:

- Multifunctional high voltage voltmeter for measuring low-energy electrostatic high voltages.
- Measures DC voltages up to $\pm 200\text{kV}$, the superimposed ripple and detects sparks
- Bench top voltmeter consisting of a measuring instrument and high voltage probe

- High voltage signal output ranging from 0 to $\pm 200\text{mV}$ instead of 0 to $\pm 10\text{V}$
- High voltage signal output ranging from 4 to 20mA instead of 0 to $\pm 10\text{V}$

Features:

- A high internal resistance ensures that the test current is small in order to protect the device under test

Typical Applications:

- Electrostatic filters
- Electrostatic spraying installations
- Ion implanter
- Etc.

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| Date: 2017-05 | REMO-HSE Hochspannungselektronik GmbH, Straubinger Str. 28, D - 94372 Rattiszell Tel.: +49 (0) 9964 / 6406 - 0 * Fax: +49 (0) 9964 / 6406 - 20 * Email: info@remo-hse.de | hvm-210s_ds_en_03 Page 1 / 4 |
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Technical Specifications

| High Voltage Measuring Range and Accuracy | |
|--|---|
| DC Voltage (steady): | 0 to ± 180 kV |
| Maximum DC Voltage: | Up to ± 200 kV for maximum 10 seconds |
| Measuring Input: | Pulse-stable, input resistance approx. $20\text{G}\Omega$ |
| Accuracy: | Better than $\pm (2\% + 5 \text{ dig.})$ |
| Resolution: | 0.01kV |
| Display: | 4 ½ digit LCD display with automatic polarity indication |

| Signal Outputs and LED Indicators | |
|--|--|
| High Voltage Analogue Signal Output: | 0 to ± 10 VDC for 0 to ± 200 kV |
| Ripple Analogue Signal Output: | 1mV corresponds to 1V within the frequency range of 5 to 100kHz |
| Spark Logic Signal Output: | If sparks appear the output delivers pulses at approx. +5VDC logic level and a pulse width of approx. 1ms |
| Spark Indicator: | In addition, if sparks appear an LED blinks red. |
| Temperature Indication: | When the momentary pushbutton switch is pressed the temperature of the measuring instrument appears on the LCD display |

| Environmental and Mechanical Data | |
|--|---|
| Operating Temperature Range: | 0 to +45°C, datasheet values apply to temperatures between +15 and +35 °C |
| Storage Temperature Range: | -25 to +70°C |
| Humidity: | 80% maximum relative humidity up to +31°C, reducing linearly to 50% at +45°C. Non-condensing (ref. EN61010-1). |
| Altitude: | 0 to 2000 m NN |
| Classification: | IP40 |
| Dimensions: | 269 mm wide, 720 mm high, 201 mm deep |
| Weight: | Approx. 5,5 kg |

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Connections

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| Measuring Input: | High voltage connection with skintop strain relief cable gland designed for inserting a high voltage cable with 4mm banana plug. |
| Earthing: | 4mm socket on both sides (left and right) of the measuring instrument |
| Power Supply: | Power supply cord with protective ground to connect to 115 or 230VAC $\pm 10\%$ (50/60Hz) or low voltage socket to connect to 24VDC $\pm 10\%$ |
| High Voltage Signal Output: | BNC socket (lower) |
| Ripple Signal Output: | BNC socket (middle) |
| Spark Signal Output: | BNC socket (upper) |

Options

- ❖ Extension adapter ADVMS-210S-5m with a 5m connecting cable for the spatial separation of measuring instrument (please quote when ordering)
- ❖ 0 ... ± 200 mV correspond to 0 ... ± 200 kV analogue output
- ❖ 4... 20mA correspond to 0 ... ± 200 kV analogue output
- ❖ Further options and customized designs available upon request

Model Selection Table: HV-Voltmeter 210S*):

| Type Designation | Supply Voltage | | | DC Analogue Output | | |
|---------------------|----------------|---------|--------|--------------------|-----------|-------------------|
| | 115V AC | 230V AC | 24V DC | 0 to ± 10 V | 4 to 20mA | 0 to ± 200 mV |
| HVMS-DC200RS-U-N1 | x | | | x | | |
| HVMS-DC200RS-I-N1 | x | | | | x | |
| HVMS-DC200RS-S-N1 | x | | | | | x |
| HVMS-DC200RS-U-N2 | | x | | x | | |
| HVMS-DC200RS-I-N2 | | x | | | x | |
| HVMS-DC200RS-S-N2 | | x | | | | x |
| HVMS-DC200RS-U-DC24 | | | x | x | | |
| HVMS-DC200RS-I-DC24 | | | x | | x | |
| HVMS-DC200RS-S-DC24 | | | x | | | x |

*) Further models are available on request.

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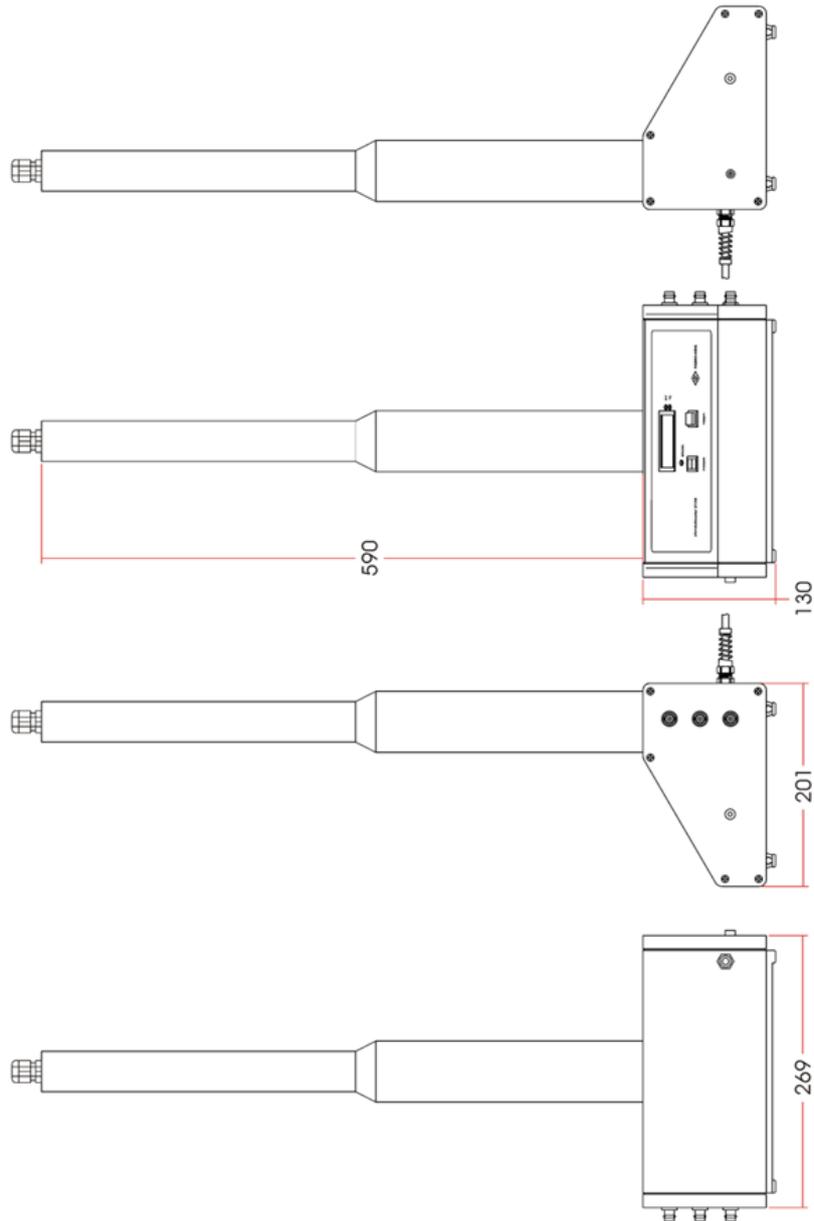
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Mechanical Drawings: HV-Voltmeter 210S



Dimensions: +/- 1,5mm

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