MD 200 / MD 200A
HIGH VOLTAGE DIFFERENTIAL PROBES SERIES

- **Surge pulse measurements**
- **Power quality measurements**
- **Rated for 7000 V/10 MHz, differential mode**
- **2 ranges: 1:1000 and 1:100**
- **Compatible with all types of oscilloscope**
- **Suitable for simple burst pulse verification**

The Teseq MD 200 and MD 200A high voltage differential probes are ideally suited to allow EMC engineers to verify their conducted EMC test generators periodically. Their performance permits to be used for many other purposes where higher voltages have to be measured in a potential free manner.

Annual calibration and periodic verification

The annual calibration of test equipment recommended by most of the quality systems (ISO 9000, ISO 17025, etc.) has to be considered as a validation of all measurements done since the last calibration.

Many EMC standards call for a verification of the test equipment before and after every test session. If the verification shows differing results, no valid test results can be assumed and the test equipment has to be re-calibrated. It is therefore highly recommended that the EMC test engineer periodically verifies his test equipment in order to ensure good functionality and accuracy. Periodic verification can be done before a test session or once a day or week or month; it is up to the user to decide. Only a few points need to be checked, which will take only a few minutes if the right test equipment is available.

Potential free (differential) measurements

Since it may be useful to measure pulses superimposed on the mains for periodic verification purposes, it is essential to work with differential measurements. Using classic non-differential probes and connecting with reversed polarity will result in the oscilloscope chassis being connected to the mains. In the best case a circuit breaker will trip, in the worst case, for example if the oscilloscope is battery powered or supplied via an isolation transformer, the oscilloscope chassis will be at a voltage equal to mains voltage plus the peak pulse voltage, which could be lethal for the user.

The Teseq high voltage differential probe MD 200 serie is ideally suited to measure all kinds of EMI pulses in the microsecond range, industrial, telecom and automotive surges as well as power line dips, dropouts and distortions.

TESEQ

Advanced Test Solutions for EMC

MD 200 / MD 200A
HIGH VOLTAGE DIFFERENTIAL PROBES SERIES

Technical specifications MD 200

Attenuation ratio:	2 ranges : 1:100 and 1:1000
Bandwidth:	DC to 10 MHz
Accuracy:	+/-2%
Max. input voltage differential mode:	7000 V peak
Max. input voltage common mode:	3500 V peak
Input impedance:	10 MΩ/7 pF each side to ground
CMRR (typical):	-80 dB at 50 Hz; -60 dB at 20 kHz
Operating temperature:	-10 to + 40C° (14° to 104°F)
Dimensions L x W x H:	207 x 83 x 38 mm (8.1 x 0.32 x 0.15'')
Connector to scope:	BNC and auxiliary earth lead
Input connectors:	Spring clips

Technical specifications MD 200A

Attenuation ratio:	2 ranges: 1:100 and 1:1000
Bandwidth:	DC to 10 MHz
Accuracy:	+/-2%
Max. input voltage differential mode:	7000 V peak
Max. input voltage common mode:	7000 V peak
Input impedance:	10 MΩ/7 pF each side to ground
CMRR (typical):	-80 dB at 50 Hz; -60 dB at 20 kHz
Operating temperature:	-10° to + 40 C° (14° to 104° F)
Dimensions L x W x H:	207 x 83 x 38 mm (8.1 x 0.32 x 0.15'')
Connector to scope:	BNC and auxiliary earth lead
Input connectors:	HV alligator clip

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691-036A February 2011

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