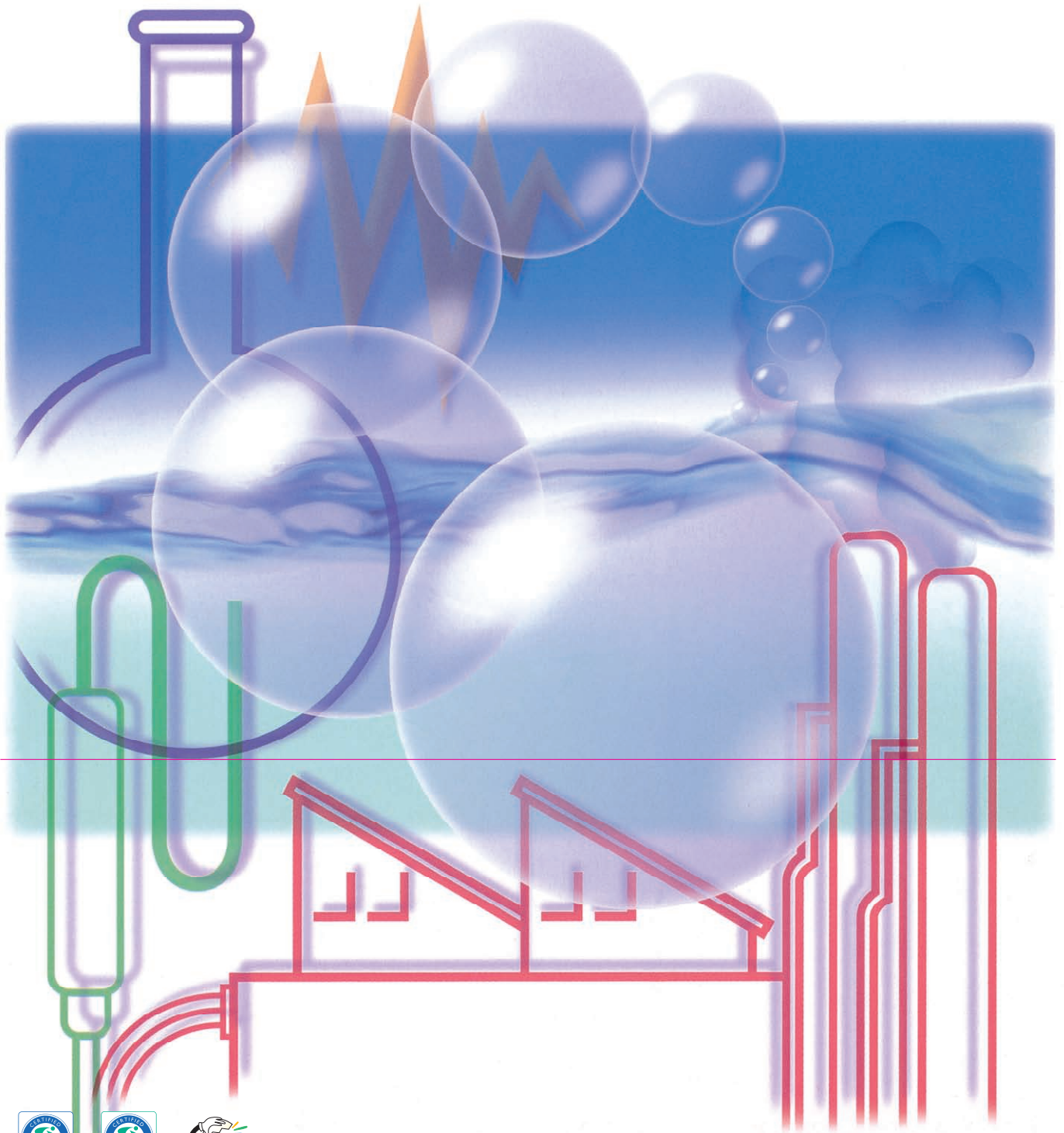


HIOKI

SHORT FORM CATALOG

Super Megohm Meters and Pen Recorders



<http://www.hioki.co.jp/>

ISO 9001 JMI-0216
ISO 14001 JQA-E-90091

HIOKI company overview, new products, environmental considerations and other information are available on our website.

Electronic measuring instruments

Digital ultra-insulation /
micro ammeter 1-CH

DSM-8104



- Measurement voltage : DC 0.1~1,000 V
- Measurement range : $1 \times 10^7 \sim 3 \times 10^{16} \Omega$
- Measures insulation resistance of capacitive/highly insulated materials at high speed with high accuracy
- High resolution current measurements of 0.1 fA
- Histogram display of selected results
- GP-IB, RS-232, Handler interface equipped as standard - optional LAN interface also available
- Full range of electrodes to suit all types of measurements

Digital ultra insulation /
micro ammeter 4-CH

DSM-8542



- Measurement voltage : DC 0.1~1,000 V
- Measurement range : $1 \times 10^7 \sim 3 \times 10^{16} \Omega$
- 4-channel, high-speed measurement capability when combined with PSU-8541 dedicated power source unit sold separately
- System compatibility made easy by connecting charge terminal, handler interface
- Measures insulation resistance of capacitive/highly insulated materials at high speed with high accuracy
- High resolution current measurements of 0.1 fA

Ultra megohm meter

SM-8220



- Meas. voltage: 10~1,000V DC (7 ranges)
- Meas. range: $0.05 \sim 2 \times 10^{10} M\Omega$ (9 ranges)
- Digital/analog display on LCD
- Suited for measurement site of high to low voltage & resistive load
- Equipped with timer, remote starter, comparator & HV-EN function (standard spec)
- Compatible for measurement of several sample types with electrodes & other devices

Super megohm meter

SM-8213



- Meas. voltage: 5~100V DC (6 ranges)
- Meas. range: $0.025 \sim 2 \times 10^6 M\Omega$ (6 ranges)
- Digital/analog display on LCD
- Insulation meter for low voltage : 5~100VDC
- Equipped with charge-discharge function (standard spec)
- Equipped with timer, remote starter, comparator & HV-EN function (standard spec)
- Current output as measurement power source : approx. 50mA
- Compatible for measurement of several sample types with electrode & other devices

SM-8215



- Meas. voltage: 50~1,000V DC (5 ranges)
- Meas. range: $0.25 \sim 2 \times 10^7 M\Omega$ (6 ranges)
- Digital/analog display on LCD
- Super insulation meter of standard type: 50~1,000V DC
- Compatible with insulation resistive meter for export approved products
- Equipped with charge-discharge function (standard spec)
- Equipped with timer, remote starter, comparator & HV-EN function (standard spec)
- Compatible for measurement of several sample types with electrodes & other devices

Super megohm meter

SM-8216



- Meas. voltage: 10~1,000V DC (7 ranges)
- Meas. range: $0.05 \sim 2 \times 10^7 M\Omega$ (6 ranges)
- Digital/analog display, 10~1000VDC
- Compatible with insulation resistive meter for export approved products
- Equipped with charge-discharge function (standard spec)
- Equipped with HV-EN function (standard spec)
- Compatible for measurement of several samples with electrode & other devices
- Alarm system available as option

Compact super megohm
meter

SM-7A



- Meas. voltage: 100~500V DC (3 ranges)
- Meas. range: $0.1 \sim 2 \times 10^8 M\Omega$ F.S. (3 ranges)
- Highly stabilized electric power source employed
- Alarm system available as option

Super megohm meter

SM-24GN



- Meas. voltage: 12~250V DC (8 ranges)
- Meas. range: $1 \sim 8 \times 10^4 M\Omega$ (Rx), $10 \sim 5 \times 10^6 M\Omega$ (CONTACT)
- Suited for production & inspection lines, improvement of productivity attainable
- GO/NO determination (Rx) of insulation of Non-measuring objects, contact condition between measuring objects & automated fig. checked as well
- Rapid response : 0.1 second

2-Channel low-frequency
characteristics measuring device

DPA-2201

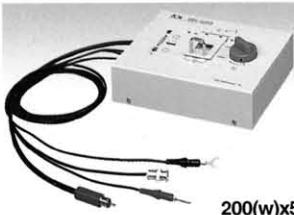


- Meas. range :
Oscillator unit : 20 Hz~200 kHz
Level measurement unit : -70 dbm~+20 dbm
Distortion measurement unit : 0.05%~30%
- General-purpose, portable experimental monitor equipped with stereo measurement functions for level differential, phase differential measurements
- The oscillator unit and level measurement unit are each equipped with 2 channels, the phase differential and level differential between these 2 channels is simultaneously measured and displayed digitally

A complete range of accessories (option) enable highly accurate measurement of even objects that have conventionally been difficult to measure.

Electrodes/shield box (options)

Electrode for chip capacitor SME-8360



For measurement of resistance of tip capacitor, with adjustable jig from 0mm to 11mm. When connected to the meter by interlock cable, meas. voltage becomes "OFF" while the lid is open to ensure safety.

200(w)x52(h)x150(d)mm

Electrode for plate sample SME-8310



Sample of 100mm square by up to 8mm in thickness is measurable. The main electrode dia. is 50mm and inner & outer dia. of ring electrode are 70mm & 80mm respectively. Meas. voltage becomes "OFF" while the lid is open to ensure safety. A selector switch allows selection of voltage or surface resistivity.

215(w)x78(h)x165(d)mm

Electrode for plate sample SME-8311



Sample of 40-100mm square by up to 8mm in thickness is measurable. The main electrode dia. is 19.6mm and inner & outer dia. of ring electrode are 24.1mm & 28.8mm respectively. Meas. voltage becomes "OFF" while the lid is open to ensure safety. The fundamental specifications are the same as SME-8310.

215(w)x78(h)x165(d)mm

Weight electrode SME-8320



This is an electrode for plate sample for use together with SME-8350 shield box. This electrode enables extremely easy measurement of surface resistivity and volume of sample with coarse surface such as carpets, etc.

The main electrode dia. is 50mm, and the ring electrode inner-dia. and outer-dia. are 70mm and 80mm respectively.

Electrode for surface resistance SME-8302



This is an electrode for surface resistance, when sample is curved shape such as, resin and rubber processed goods, TV cathode tube or sample is small. Surface resistance can be measured by pressing the rubber tips at the tip onto the sample. Electrode interval is 10mm and up to $10^{10}\Omega$ can be measured.

Electrode for surface resistance SME-8301



Surface resistance can be easily measured by simply pushing the electrode against the specimen. It measures surface resistance of anti-static related goods in combination of mainly SM-8213. Lead length is approx. 1m

Electrode for liquid sample SME-8330



This is an electrode for liquid sample which is electrically guarded. Total volume is 25ml. Capacitance between main and counter electrode is approx. 45pF. Electrode constant is approx. 500cm. Distance between both electrodes is 1mm. Outer dia. is 36mm, height is approx. 140mm. Resistance up to $10^{10}\Omega$ (at 1000V) can be measured when this electrode is used together with SM-8220

Electrode for continuous liquid sample SME-8335



This enables insulation resistance measurement of flowing machine oil or cleaning liquid. The electrode requires 1/4 NPT joints, etc. The electrode should be secured with an U-bolt using the attached metal fitting. Inner volume is approx. 30ml. Electrode constant is approx. 75cm

Shield box SME-8350



This is used as a sample accommodation box during measurement of a high-insulation resistance sample, or inductive or capacitive sample to perform electromagnetic shielding.

250(w)x100(h)x200(d)mm

Standard resistor box SR-2



This is a resistor box for calibration of DKK-TOA's super megohmmeters. Max. voltage is 1,000VDC and resistor value covers from 10 M Ω to 10,000M Ω in 24 points.

270(w)x90(h)x195(d)mm

Recorders

Intelligent recorder JULIUS

INR-9011 (1Pen)~9031 (3Pen)



- Infomedia inclusive of chart, LCD, MO, FD & MC, multi-recording, monitoring, data storage & processing available
- Additional of standard unit enables data logging of numerous channels with small no. of pens (1 pen : 2CH, 2 pens : 4CH, 3 pens : 6CH)
- Recording width : 250mm
- Ease of operation attained with individual key & LCD screen
- Input : voltage, thermocouple, RTD & transient

INR-9041 (4Pen)~9121 (12Pen)



- Additional of standard unit enables data logging of numerous channels with small no. of pens (Max. of 12 pens & 24 Ch logging available)
- Compliance with Infomedia, multi-recording, monitoring, data storage & processing available
- Recording width : 250mm
- Inexpensive, compact & light-weight unit
- Wide recording subject ; V/I DC, thermo couple, pH, ORP, EC, RTD, VAC & transient
- Monitor & control on Ethernet by combining with interface server for measurement
- Input : voltage, thermocouple, RTD & transient

Personal recorder PHOENIX

PRR-5011 (1Pen)~5041 (4Pen)



- Inexpensive, 1~4 Pen series
- Auto-pen rest & semi auto loading functions
- Recording width : 250mm
- Recording roll paper : 45m
- DC power source available as option
- Compensation function for pen-gap available as option
- Input : $\pm 0.5\sim 250\text{mV}$ & V F.S. (18 ranges)

High performance portable recorder

EPR-3511 (1Pen)~3531 (3Pen)



- Best suited for field use with highly functional features
- Installation of memory card, recreation & processing of data on PC possible
- Installation of RS-232, remote monitoring & processing of data-on-site possible
- Recording width : 150mm
- Low power consumption design
- Drip proof cover available as option
- Input : $\pm 0.5\sim 250\text{mV}$ & V F.S. (18 ranges)

Portable recorder

EPR-3011 (1Pen)•3021 (2Pen)



- Easy field measurement & recording
- Inexpensive, compact & light-weight unit
- Recording width : 150mm
- Low power consumption design
- Drip proof cover available as option
- Compensation function for pen-gap available as option
- Input : $\pm 5\sim 250\text{mV}$, $\pm 0.5\sim 25\text{V}$ F.S. (12 ranges)

High sensitivity recorder

EPR-10B (1Pen)



- Compact & light-weight
- Inexpensive
- Fold or roll type recording paper available
- Recording width : 150mm
- Input divider, upper & lower limits setting function available as option
- Input : $\pm 5\sim 50\text{mV}/\pm 0.25\sim 1\text{V}$ F.S. (5 ranges)

Flat-bed recorder

FBR-251A (1Pen)~253A (3Pen)



- Best suited for recording results of analytical instruments
- Highly reliable, rapid response & high resolution
- Recording width : 250mm
- Simultaneous chart feeding by external signal available
- Fold or roll type recording paper available
- Equipped with "start line set" button
- Input : $0\sim 50\text{mV}/0\sim 100\text{V}$ F.S. (16 ranges)

The Electronic Measuring Instruments business segment of DKK-Toa Corporation will be owned and operated by HIOKI E.E.CORPORATION as of November 1, 2006.

HIOKI

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