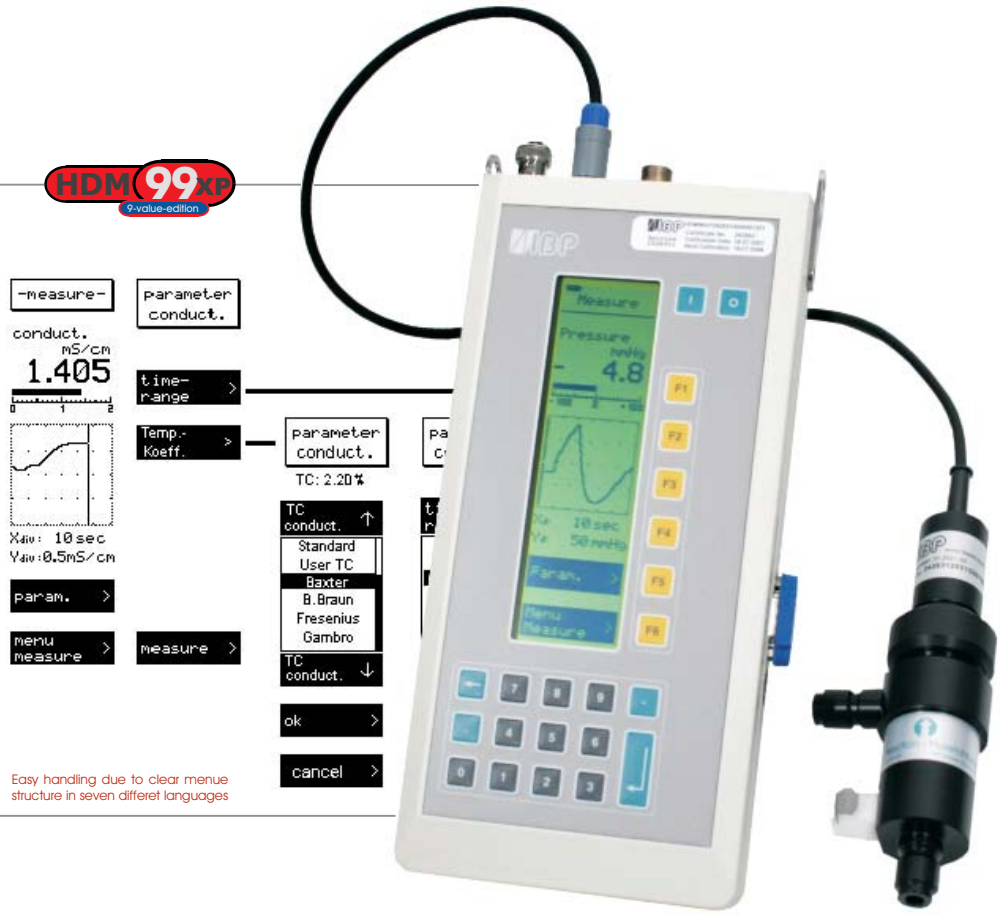
Dialysis Reference Meter

Leading in Features and Accuracy

HDM99XP

The gold standard
The all-in-one tool

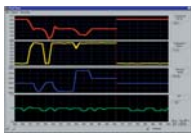


Measuring Channels

- Conductivity
- Temperature
- Pressure
- pH
- Flow
- Voltage
- Frequency
- Time Period
- Events

Key Features

- Nine Measuring Channels
  The all in one tool
- Can be used with any brand of dialysis machine
- Selectable temperature coefficient (By dialysis machine manufacturer) for high accuracy conductivity measurement
- Also measures conductivity of RO water
- Graphical display of measurements
- Voltage measurement with oscilloscope function
- RS232 Computer Interface for data aquisition



- CE marked as medical device
  The only meter available with this high class certificate
- Canada Medical Device licence
- FDA 510(k) approval

Dialysis requires reliability and accuracy

Haemodialysis calls for high reliability and extreme accuracy. The HDM99XP Haemodialysis Reference Meter allows highly accurate and reliable measurement of conductivity, temperature, pressure, pH, flow, voltage, frequency, time period and events.

Conductivity is measured over four measuring ranges from 0.00 to 200 mS/cm. Consequently, a full array of commonly used measurements may be taken beginning with the conductivity of the RO water and ending with the total conductivity of the dialysate concentrate.

The device has been developed by specialists and integrates the know-how and experience of 30 years in the design of reference meters for dialysis. Intelligent product details along with innovative technology deliver great value.

Advanced technology

Advanced processor technology combined with highly developed software results in a completely new type of measuring instrument with special features on a level of accuracy not achievable with other units.

The HDM99XP stands out from all the other instruments on the market because of its large graphic display. The displayed text is user-selectable in English, French, Spanish, Italian, Portuguese, Dutch or German. There are different ways, including plotting, to display the measurements. The progress of all measurement parameters can be thus observed for the purpose of fault diagnosis. There is an oscilloscope function built into the plotting display for voltage.

The device is truly an all-in-one tool for the busy dialysis technician.

Quality

The HDM99XP is produced under a certified quality management system (ISO 13485:2003). IBP dialysis meters are the only meters registered as medical devices in Europe. We offer an annual calibration service with certification in accordance with ISO 17025.

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Specifications

Conductivity

Range	0 … 200 mS/cm
Accuracy	0 … 199.9 uS/cm +/- 0.6 uS/cm
	200 … 1999 uS/cm +/- 6 uS/cm
	2 … 19.99 mS/cm +/- 0.03 mS/cm
	20 … 24.99 mS/cm +/- 0.06 mS/cm
	25 … 99.99 mS/cm +/- 0.3 mS/cm
	> 100 mS/cm +/- 0.6 mS/cm
	Temperature coefficient selectable.

Temperature

Range	0 … 100 °C
Resolution	0.01 °C
Accuracy	25 … 40°C +/- 0.05 °C
	Otherwise +/- 0.07 °C

Pressure

Range	-700 …1600 mmHg
Units	mmHg, kPa, atm, psi or bar - selectable
Resolution	0.1 mmHg
Accuracy	0 … 300 mmHg +/- 0.5 mmHg
	Otherwise +/- 1 mmHg

pH

Range	pH 0 … 14
Resolution	pH 0.01
Accuracy	pH +/- 0.02

Flow

Range	100 … 2000 ml/min
Resolution	1 ml/min
Accuracy	100 … 500 ml/min +/- 1.0% of reading
	Otherwise +/- 3.0% of reading

Voltage

Range	+/- 40 V AC/DC
Frequency	up to 3 kHz
Resolution	0.01 V
Accuracy	+/- 0.125% from full scale value

Frequency

Range	250 kHz
Input voltage	5...24 V
Resolution	1 Hz
Accuracy	+/- 0.2% of reading

Period Duration

Range	up to 1000 sec
Input voltage	5...24 V
Resolution	1 msec
Accuracy	+/- 0.2% of reading

Pulse/Event

Range	99999
Input voltage	5...24 V

Interface

RS232 - Electrically Insulated Interface

Power supply

Internal rechargeable NiMH battery

External charger

Input Voltage	100 … 245 V / 50/60 Hz
Output Voltage	12 V DC, 1500 mA

Dimensions & Weight

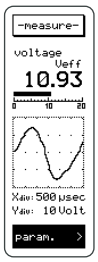
270 x 120 x 50 mm - 10.6" x 4" x 1.8"

1.1 Kg - 2.4 lbs including probe

The #1 conductivity probe

- Modern 4-pole electrode in carbon plastic technology for conductivity measurement. Years of experience have proven this design and construction absolutely linear and stable. IBP is the only manufacturer of dialysis meters using a 4-pole electrode for conductivity measurement.
- Electrode may be used either as flow through or dip electrode. May also be used for testing RO water and dialysate concentrate.
- The pressure connector has an automatic closure. This enables the measurement of dialysate pressure without any additional adapters.

Helpfull measurement options

- High accuracy flow measurement for calibration of dialysate and blood pump flow and RO output flow.
- DC and AC Voltage measurement
- 

  Oscilloscope function allows to show alternating signal typically found in dialysis machines

- Due to the extreme accuracy of the pressure measurement the HDM99XP allows to calibrate blood pressure measurement devices in accordance with DIN EN 1060.
- Event counting allows for example to count how often a valve is switching

For complete details on IBP products visit:

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