

# HDM97Pocket

Reference Meter Product Family



#### HDM97<sub>B0</sub>

- » Conductivity
- » Temperature
- » Pressure
- » Flow

#### HDM97<sub>BP</sub>

- » Conductivity
- » Temperature
- » Pressure
- » pH

#### НОМ97во

- » Conductivity
- » Temperature
- » Pressure

#### HDM97<sub>BN</sub>

- » Conductivity
- » Temperature

# HDM97<sub>BL</sub>

» Flow

# **APPLICATIONS**

- » Hemodialysis machines
- » RO-Water Systems

#### **KEY FEATURES**

- » Can be used with any brand of dialysis machine
- » Selectable conductivity temperature coefficient for high accuracy conductivity measurement



- » Allows conductivity measurement of RO water
- » With special option blood pressure meters can be calibrated
- » Timer function
- » Pressure drop measurement
- » Allows field calibration FDA 510(k) approval
- » USB Computer Interface for data acquisition
- » FDA 510(k) approval



# **Dialysis Requires Reliability and Accuracy**

Advanced technology Hemodialysis calls for high reliability and extreme accuracy. The HDM97 Pocket Reference Meter series allows highly accurate and reliable measurement of conductivity, temperature, pressure, pH and flow. The device has been developed by specialists and integrates the knowhow 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 electronic 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. To achieve the highest conductivity measurement accuracy possible the conductivity temperature coefficient is selectable by dialysis machine manufacturer. A rechargeable Li-lon-Polymer battery in combination with

intelligent power management allows the meter to run continuously for more than 200 hours

# **Details Technicians Are Looking For**

The guiding principle in the development of the HDM97 was: "What are the daily needs of the busy dialysis technician?"
The outcome is a collection of innovative details available only from IBP dialysis reference meters: Multifunctional Conductivity probe, long term data acquistion and pressure drop measurement mode are the features technicians are searching for.

#### Quality

The HDM97Pocket meters are produced under certified ISO 13485 quality management system. The HDM97Pocket reference meters are registered as medical devices in USA. We offer an annual calibration service traceable to PTB and NIST with certification in accordance with the ISO 17025 standard.

# HDM97 Pocket



# **Specifications**

# CONDUCTIVITY

#### Only Version BN, BO, BP and BQ

Range 0 ... 30 mS/cm

Accuracy 0 to 199 uS/cm +/- 0.6 uS/cm

200 to 1999 uS/cm +/- 6 uS/cm 2 to 11.99 mS/cm +/- 0.06 mS/cm 12 to 15.99 mS/cm +/- 0.03 mS/cm 16 to 30 mS/cm +/- 0.06 mS/cm Temperature coefficient selectable.

# **TEMPERATURE**

# Only Version BN, BO, BP and BQ

Range 0 to 100 °C
Resolution 0.01 °C
Accuracy +/- 0.1 °C

# **PRESSURE**

#### Only Version BO, BP and BQ

Units mmHg, kPa, mbar, PSI - selectable Range -700 to 1900 mmHg (2.5 Bar)

Resolution 0.1 mmHg

Accuracy 0 to 300 mmHg +/- 1 mmHg

Otherwise +/- 2 mmHg Ceramic Sensor fluid resistant

#### Only option H for BO, BP and BQ

Range -700 to 1900 mmHg (2.5 Bar)

Resolution 0.01 mmHg

Accuracy 0 to 300 mmHg  $\pm$  0.5 mmHg

301 to 1000 mmHg +/- 1 mmHg

Otherwise  $\pm$ /- 2 mmHg

#### **FLOW**

# Only Version BL and BQ

Range 100 to 2000 ml/min Resolution 1 ml/min

Accuracy +/- 2,0 % of reading

# pН

#### **Only Version BP**

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

Interface USB 2.0 - electrically insulated

**Power supply** Internal rechargeable - LI-Ion-Polymer battery

External charger  $\;$  Input 100 ... 245 V / 50/60 Hz

Output 5 V DC, 500 mA

Or via USB-Interface from a computer

**Dimensions** 165 x 82 x 33 mm - 6.5" x 3.2" x 1.3" **& Weight** 0.4 Kg - 0.88 lbs including probe

#### **Details Technicians Are Looking For**

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



#### **Helpful Options**

» For pressure measurement optionally a higher accuracy is available which allows calibration of blood pressure measurement devices in accordance with DIN EN 1060.



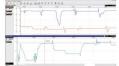
» A timer mode, with start stop function, allows to measure time period with a resolution of 100 msec



» The and version allows flow measurement to calibrate dialysate flow as well blood and infusion pumps.



» The HDM97 meter has an USB interface for easy connection to a personal computer. The IBPView software allows the user to collect, store and visualize data taken from measurements with the HDM97.



» For pressure measurement on Fresenius machines an adapter is available.



» For convenient attachment of the meter to the infusion pole a fold-away holder is part of the meter. This movable holder also allows use of the meter in a tilt position on a flat surface.



# For complete details on IBP products visit: www.ibpmedical.com

IBP Medical GmbH Ikarusalle 15 30179 Hannover Germany

Phone: +49 511 651647 eMail: info@ibpmedical.com

Version WPF 200516