

Dialysis Calibration Meters

The meter technicians trust and rely on.

Mesa Labs technician meters play a crucial role of calibrating dialysis machines around the world, to ensure accurate delivery of correct dialysate prescription. Whether they are used in manufacturing line or in clinics to troubleshoot, Mesa Labs technician meters remain reliable, must-have tool.

SmartHDM System



Specifications

Dimensions

9.25" x 5.75" x 1.26"

Weight

1.65 lbs

Power

Battery

Battery Type

8000 mAh
Li-polymer battery
(Rechargeable)

Conductivity – HDU-CDTP

CONDUCTIVITY:

Range: 0 to 200.00 mS/cm

Accuracy: 0 to 199 uS/cm $\pm$ 0.6 uS/cm
200 to 1 999 uS/cm $\pm$ 6 uS/cm
2 to 11.99 mS/cm $\pm$ 0.06 mS/cm
12 to 19.99 mS/cm $\pm$ 0.03 mS/cm
20 to 200 mS/cm $\pm$ 0.6% of reading

Temperature

Compensation: Referenced to 25°C
Adjustable via multiple modes: linear one value, dynamic two values, nLF-Iso - nonlinear according to ISO7888

TEMPERATURE:

Range: 0 to 100°C

Resolution: 0.01°C

Accuracy: $\pm$ 0.1°C

Flow – HDU-FL100.2000

Measuring principal:

Turbine

Range: 100 to 2000 ml/min H₂O
at 22°C / 71.6°F

Resolution: 1 ml/min

Accuracy: $\pm$ 2.0 % of reading

Fluid temperature: -20°C to +80°C

Pressure: 0 to 5 bar at 22°C

pH – HDU-pH-I

Range: 0 to 14 pH

Resolution: 0.01 pH

Accuracy: $\pm$ 0.02 pH

Pressure

HDU-PRS30 Pressure Sensor

Range: -13.5 to 36.7 Psi/ -0.90 to 2.5 bar/ -700 to 1,900 mmHg

Resolution: 0.01 mmHg

Accuracy: 0 to 300 mmHg $\pm$ 1 mmHg
Otherwise $\pm$ 2 mmHg

Overpressure: 2 x Full Scale

Media

Compatibility: Gasses and Fluids

HDU-PRS100 Pressure Sensor

Range: -13.5 to 100 psi/ -0.90 to 6.9 bar/ -700 to 5,150 mmHg

Resolution: 0.1 mmHg

Accuracy: 0.1% Full Scale

Overpressure: 2 x Full Scale

Media

Compatibility: Gasses and Fluids

ISO 13485 Certification

To ensure these meet the highest level of compliance as a medical device, all Mesa Labs technician meters are developed and manufactured in facilities certified under ISO 13485 quality management system.



HDM97Pocket Meter

Specifications

Dimensions

6.5" x 3.2" x 1.3"

Weight

0.88 lbs

Power

Battery or Plugged In

Battery Type

Lithium-Ion Polymer
(Rechargeable)

HDM97BQ and HDM97BO Sensor Specs

CONDUCTIVITY

Reference temperature 25° C. Temperature compensation is 2.07%/K. Adjustable from 0.00 to 4.00%/K or selectable from dialysis machine manufacturer preset values

Range:	0.0 μ S/cm - 30 mS/cm
Resolution:	0.0 - 200 μ S/cm: 0.1 μ S/cm 201 - 1999 μ S/cm: 1 μ S/cm 2 - 30 mS/cm: 0.01 mS/cm
Accuracy:	0.0 - 200 μ S/cm: $\pm$ 0.6 μ S/cm 201 - 1999 μ S/cm $\pm$ 6 μ S/cm 2 - 11.99 mS/cm $\pm$ 0.06 mS/cm 12 - 15.99 mS/cm: $\pm$ 0.3 mS/cm 16 - 30 mS/cm: $\pm$ 0.6 mS/cm

TEMPERATURE

Range:	0 to 100° C
Resolution:	0.01° C
Accuracy:	$\pm$ 0.1° C

PRESSURE (Standard)

Range:	-13.5 to 36.7 Psi, -700 - 1900 mmHg, 2.5 Bar
Resolution:	0.01 mmHg
Accuracy:	0 - 300 mmHg: $\pm$ 1 mmHg Otherwise $\pm$ 2 mmHg

PRESSURE (High Accuracy - Option H)

Range:	-13.5 to 36.7 Psi, -700 - 1900 mmHg, 2.5 Bar
Resolution:	0.01 mmHg
Accuracy:	1 - 300 mmHg: $\pm$ 0.5 mmHg 1000 - 1900 mmHg: $\pm$ 2 mmHg Otherwise $\pm$ 1 mmHg

* Sensor not fluid resistant

FLOW

Range:	100 - 2000 ml/min
Resolution:	1 ml/min
Temperature Range:	0 - 85°C
Accuracy:	$\pm$ 2.0% of measured value
Repeatability:	Better $\pm$ 0.5%
Pressure:	0 to 5 bar at 22° C

Products and Sets - SmartHDM

		HDC84 Basic Bundle	HDC84 HDU-Hemodialysis Basic Bundle	HDC84 HDU-Hemodialysis Complete Bundle
Order #		31.0320.01	31.0320.02	31.0320.03
HDC84 incl. IV-Pole Holder		●	●	●
USB power adaptor EU/US/UK 5V/2A HDM97Pocket, HDC84 incl. USB Cable	31.5020.50	●	●	●
Quick Manual in EN + one of DE/FR/ES/IT/CN + USB-Stick with all Manuals, Drivers, etc.		●	●	●
HDU-CDTP - Conductivity and Temperature Sensor 0200 mS/cm 0100 °C (32-212°F)	31.0400.00	○	●	●
HDU-PRS30 Pressure Sensor 30psi (2bar, 1550mmHg)	31.0431.30	○	●	●
HDU-PRS100 Pressure Sensor 100psi (6.7bar, 5150mmHg)	31.0431.70	○	○	○
HDU-FL 100...2000, Flow sensor (100-2000 ml/min)	31.0450.00	○	○	●
HDU-pH-I, pH Interface	31.0465.00	○	○	○
HDU-pH-I Accessory Bundle (pH-Probe, pH Buffer 6/7/8 á 100ml, KCl 5ml)	31.0465.10	○	○	○
HDU-Sensor cable USB A, 1.8 meter / 6 ft (One for each HDU-Sensor)	31.0485.20	○	2	3
Hansen Flow through adapter for Conductivity Temperature Sensors	31.0491.00	○	●	●
Pressure Tube complete set for all HDM meters & HDU Sensors	31.2017.01	○	●	●
Secondary Standard Solution 14.00 mS/cm - 100 ml	32.0140.00	○	●	●
HDC-System Case	31.0329.00	○	●	●

● Part or Feature contained in Bundle

○ Part or Feature not contained in Bundle

Products and Sets - HDM97Pocket		HDM97Pocket B0	HDM97Pocket B0 Complete System	HDM97Pocket BQ	HDM97Pocket BQ Complete System
Order #		31.0103.01	31.0103.02	31.0105.01	31.0105.03
HDM97Pocket B0 Basic device incl. IV-Pole Holder		●	●	○	○
HDM97Pocket BQ Basic device incl. IV-Pole Holder		○	○	●	●
Pressure Sensor 30psi, water resistant		Standard	Standard	Standard	Standard
Pressure Sensor 30psi, high resolution (not water resistant)	Option "H"	Option	Option	Option	Option
Conductivity probe 0-100°C, 0-30 mS/cm, direct connection		Standard	Standard	Standard	Standard
Conductivity probe 0-100°C, 0-30 mS/cm, detachable	Option "C"	Option	Option	Option	Option
HDM97 Pocket Flow Sensor 100.2000 ml/min (only for HDM97Pocket BQ)	31.0110.00	○	○	○	●
USB power adaptor EU/US/UK 5V/2A HDM97Pocket, HDC84 incl. USB Cable	31.5020.50	●	●	●	●
Quick Manual in EN + one of DE/FR/ES + USB-Stick with all Manuals, Drivers, etc.		●	●	●	●
Hansen Flow through adapter for Conductivity Temperature Sensors	31.0491.00	●	●	●	●
Pressure Tube complete set for all HDM meters & HDU Sensors	31.2017.01	●	●	●	●
Secondary Standard Solution 14.00 mS/cm - 100 ml	32.0140.00	●	●	●	●
HDM97 Pocket Case	31.0121.01	○	●	○	●

● Part or Feature contained in Bundle

○ Part or Feature not contained in Bundle