



HEMEDEX®

Bowman Perfusion Monitor® FAQs

Bowman Perfusion Monitor®



The Bowman Perfusion Monitor (BPM) is the most innovative technology of its kind. The BPM continuously quantifies tissue blood flow (perfusion) in real-time, in absolute physiological units of ml/100g-min.

The BPM includes (1 each): Perfusion Monitor, power cord, Umbilical Cord, printer paper, and an instruction manual.

Where is the BPM primarily used and in what type of patient population?

Neurointensive Care Units (SAH, TBI, ICH,...)
OR (TAO, AVM, Moya-Moya, EC-IC Bypass,...)

What information does the BPM display in addition to perfusion?

Tissue temperature:
In the process of measuring perfusion, the BPM measures tissue temperature

Tissue thermal conductivity (K):
In the process of measuring perfusion, the BPM measures the tissue property thermal conductivity (K), which is a function of the tissue water content. Excessive tissue water content is edema.*

Can the BPM accommodate more than one probe?

The BPM connects with one probe at a time.

Can the BPM interface with other patient monitors?

The BPM provides both analog and digital outputs which interface with a number of patient monitors and data acquisition systems.

Digital output interfaces, all of which work with the digital data stream:
ICU Pilot by M-Dialysis
CNS System by CNS Technologies
Bedmaster by Excel Medical
ICM+ by University of Cambridge

Analog output interfaces:
Phillips monitors: using VueLink
Powerlab by AD Instruments
BCI2000

Can I review patient data on the monitor?

Yes, current and prior patient data still on the monitor can be reviewed on the screen.

How much data can be stored in the BPM?

The BPM can store up to 15 days of patient data.

Can I download patient data?

Yes, patient data can be downloaded for review and analysis. Hemedex provides the user with downloading tools. If you are a current user, please contact us.

How often should I download the patient data?

The available time for storing data (indicated in days) is always shown at the bottom right of the screen. Hemedex recommends you download patient data if you believe your monitoring will extend longer than the available time.

Does the BPM have an alarm?

Yes, the alarms are disabled by default. User can enable alarms and set limits.

What can you print from the BPM?

Through the internal printer, you have the option to print the following:

- | | |
|--|---------------------------------|
| Perfusion vs. time plot | List of Time, K, and PPA values |
| Perfusion and temperature vs. time plots (on the same strip) | Current BPM settings |

Does the BPM need to be calibrated and zeroed?

No, the monitor requires no calibration or zeroing.

Can the BPM operate on battery power?

No, the BPM operates on A/C power (110V or 220V, depending on location)

Can the BPM be pole mounted?

Yes.

*Sang-Bae Ko, H. Alex Choi, Gunjan Parokah, J. Michael Schmidt, Kiwon Lee, Neeraj Badjatia, Jan Claassen E. Sander Connolly, and Stephan A. Mayer. "Real Time Estimation of Brain Water Content in Comatose Patients." *Annals of Neurology* DOI: 10.1002/ana.23619 (2012).