

SPECIFICATIONS FOR LASER DOPPLER BLOOD FLOW METER

1. The system should be stand-alone Laser Doppler Blood Flow Monitor for dynamic microvascular blood flow assessments.
2. The system should have Single & Dual Channel Options with stacking case design.
3. The system should have Memory Chip probes: for a wide range of applications. Calibration constants should be stored within the probe itself with timed re-calibration reminders.
4. The system should have inbuilt temperature measurement for skin probes. Also the system should be upgradable to support simultaneous protocol control of pressure cuff, iontophoresis and skin heating modules for reproducible blood flow provocation as well data acquisition.
5. The system should have following measurement parameters: Flux (tissue perfusion), Conc* (blood cell concentration) and DC (mean intensity)
6. The system should have temperature stabilised output laser diode; 785nm. Maximum output power 2.5mW.
7. The system should have temperature range of 5- 50deg.C and resolution of 0.1deg.C and accuracy of +/-0.3deg.C
8. The system's Laser Doppler Signal Processing of bandwidth of High pass of 20Hz and Low pass of 3kHz*, 15kHz, 22kHz*.
9. The system should also have Flux smoothing time constants: 0.1s*, 0.5s*, 1.0s, 3.0s* and unfiltered* along with automatic gain control and zeroing.
10. The system should be directly connected to PC through USB.
11. The system should be upgradable to measure Tissue Oxygenation & temperature
Measurement using same probe which is used for Blood Flow assessment.

12. The system should be of Safety/ Quality Standards which is FDA Laser Notice No.50
CE Certified
13. System should be provided with compatible PC.
14. System should have warranty of 03 years from the date of installation.