

3 Models to Meet Your Needs

BLF21 single channel • BLF21D dual channel • BLF21A alarm model •

BLF21 perfusion monitors report BLOOD FLOW on digital displays.

- **Pulsatile or mean signals available via analog or optional digital RS-232 ports**

Measurements are sensitive to small changes in tissue perfusion. The waveform recorded by a chart recorder or by a computer shows heart beat synchronous pulsatility of the microperfusion.

BLF21-Series



Housed in a small lightweight, flame retardant plastic cases, meters are equipped with a convenient multi-position handle/stand.

The BLF 21 (single channel) Perfusion Monitor reports **FLOW** on its front panel digital display. It also features: a rear panel analog output in 0-5 volts DC; and computer compatible output (RS-232) available with the **Personal (-P) Computer Interface Option**.

The BLF 21D (dual channel) Perfusion Monitor contains two complete flowmeter packages in a case less than 5 cm taller than the single channel unit. It reports **FLOW** on two digital displays, two analog outputs, and an available port which carries data from both channels on one RS232 cable to your personal computer.

BLF21 Alarm Series



The BLF 21A (alarm model) Perfusion Monitors report **FLOW** in ml/min/100 g tissue for preop, intraop and post-surgical monitoring of tissue perfusion. The low level alarm alerts staff both visually and audibly that the perfusion values have fallen below set levels.

Specifications

Weight

BLF21 & BLF21A	2 Kg
BLF21D	3.5 Kg

Case Dimensions (w x d x h)

BLF21 & BLF21A	26 x 25 x 6 cm
BLF21D	26 x 25 x 10 cm

Options

Computer Interface (-P) Internal A/D circuitry and RS-232 port to connect flowmeter to an IBM-compatible computer via its serial port. WINDAQ software included.

Laser

Infrared laser diode: class 1 optical
power output: < 2 wavelength: 780 nm

Power (at tip of probe) < 2 mW

Field of Measurement

Approximately 1 mm³ @ 1 mm depth into the tissue (for probes having 0.5 mm spacing between transmitting and receiving optical fibers)

Doppler Signal Band

24 Hz - 24 KHz

Output Range

Flow 0 - 100 Tissue
Perfusion Units

Digital output time constants

BLF21 & BLF21D 0.4 sec T/C

BLF21A 2.5, 15 or 75 sec which gives a "settling time" or averaging time of 10 sec, 1 min or 5 min

Analog Output Time Constants

0.1, 1.0 and 3.0 sec. switch-selectable

Patient Isolation

No electrical connection between the instrument's line ground and flowsensor.

Line to Meter Isolation

Metal components of the meter case (back panel, ground to the analog outputs, front panel) are connected to the line ground. Line current leakage < 50 µ Amps.

Warm-up Time 10 minutes

Power Requirements

Factory set at 100 VAC, 120 VAC, 220 VAC or 240 VAC 50/60 Hz, single phase

Power Line Fuse

BLF 21, BLF21A	0.25 AMP
BLF 21D	0.5 AMP