



CDI™ Blood Parameter Monitoring System 500

Optical fluorescence and reflectance-based in-line system to continuously monitor eleven critical blood gas parameters with lab-quality accuracy

SPECIFICATIONS

| Displayed parameters | Operating range | Resolution |
|--------------------------------------|----------------------------|------------------|
| pH | 6.8 – 8.0 pH units | 0.01 pH units |
| PCO ₂ | 10 – 80 mmHg (1 – 11 kPa) | 1 mmHg (0.1 kPa) |
| PO ₂ | 10 – 500 mmHg (1 – 67 kPa) | 1 mmHg (0.1 kPa) |
| K ⁺ | 1.0 – 8.0 mmol/L | 0.1 mmol/L |
| Temperature | 10°C – 45°C | 0.1°C |
| Oxygen saturation (SO ₂) | 60% – 100% | 1% |
| Hematocrit (Hct) | 15% – 45% | 1% |
| Total hemoglobin (Hgb) | 5 – 15 g/dL | 0.1 g/dL |
| Oxygen consumption | 10 – 400 mL/min | 1 mL/min |
| BE | -25 – 25 mEq/L | 1 mEq/L |
| HCO ₃ | 0 – 50 mEq/L | 1 mEq/L |
| Blood flow | 0 – 9.9 L/min | 0.1 L/min |

| Physical specifications | Monitor | Calibrator |
|-------------------------|-------------------|------------------|
| Height | 11.0" (27.9 cm) | 12.5" (31.8 cm) |
| Width | 12.5" (31.8 cm) | 8.0" (20.3 cm) |
| Depth | 6.0" (15.2 cm) | 8.0" (20.3 cm) |
| Weight | 16.1 lbs (7.3 kg) | 8.4 lbs (3.8 kg) |

| Monitor power requirements and specifications | |
|---|---|
| | 100 – 240 VAC, 50/60 Hz |
| | 12 V lead acid backup battery |
| | Data output port: RS-232 serial interface |
| | Pumping systems input port: RS-232 serial interface |

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|----------------------|--------------------------|
| CDI510H shunt sensor | Sterile, heparin-treated |
| | Priming volume 1.2 mL |

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|-------------------------------|--|
| System measurement cycle time | pH, PCO ₂ , PO ₂ = one measurement per second |
| | K ⁺ = one measurement per six seconds |
| | SO ₂ , Hct, Hgb = one measurement per eighteen milliseconds |

| | |
|-----------------------|-------------------|
| System display update | Every six seconds |
|-----------------------|-------------------|



CDI™ Blood Parameter Monitoring System 500

▶ Ordering Information

| DESCRIPTION | CATALOG NO. | UNITS/CASE |
|---|-------------------|------------|
| CDI™ System 500 with ONE blood parameter module and one Hct/Sat probe | 500AHCTSET | 1 |
| Or | | |
| CDI™ System 500 with TWO blood parameter modules and one Hct/Sat probe | 500AVHCTSET | 1 |
| The CDI™ System 500 is comprised of the following components | | |
| Monitor with ONE blood parameter module and one Hct/Sat probe | 500AHCT | 1 |
| Or | | |
| Monitor with TWO blood parameter modules and one Hct/Sat probe | 500AVHCT | 1 |
| Calibrator | 540 | 1 |
| Monitor Pole Clamp, 7.0" (17.8 cm) arm length, calibrator mount | 517 | 1 |
| Cable head bracket | 519 | 1 |
| Accessories for use with the CDI™ System 500 | | |
| Gas A, calibration gas for use with Calibrator model 540 | 506 | 1 |
| Gas B, calibration gas for use with Calibrator model 540 | 507 | 1 |
| Printer paper | 7310 | 5 |
| Monitor pole clamp, 4.5" (11.4 cm) arm length | 518 | 1 |

Disposables for use with CDI™ System 500

| | | |
|--|-----------------|----|
| CDI H/S Cuvette 1/4" x 1/4" | 6914 | 20 |
| CDI H/S Cuvette 3/8" x 3/8" | 6913 | 20 |
| CDI H/S Cuvette 1/2" x 1/2" | 6912 | 20 |
| CDI H/S Cuvette 1/4" x 1/4" with 6" (15.2 cm) extension tube | 6934 | 10 |
| CDI H/S Cuvette 3/8" x 3/8" with 6" (15.2 cm) extension tube | 6933 | 10 |
| CDI H/S Cuvette 1/2" x 1/2" with 6" (15.2 cm) extension tube | 6932 | 10 |
| CDI Shunt sensor, heparin treated | CDI510H | 20 |
| Shunt sensor bypass line 1/4" | CX-FAC02 | 20 |
| Shunt sensor bypass line 1/4", with X Coating™ | CX-FAC02X | 20 |
| Shunt sensor bypass line 3/8" | CX-FAC03 | 20 |
| Shunt sensor bypass line 3/8", with X Coating™ | CX-FAC03X | 20 |
| Shunt sensor bypass line 1/2" | CX-FAC04 | 20 |
| Shunt sensor bypass line 1/2", with X Coating™ | CX-FAC04X | 20 |

✓ Features

CDI™ Blood Parameter Monitoring System 500

- Continuous measurements and calculations
- Lab-quality accuracy
- Easy-to-use in-line shunt sensor
- Color LCD display
- Integral printer
- Automated 2-point gas tonometered calibration



CDI Model 540 calibrator



CDI System 500 shunt sensor



CDI H/S cuvette

Xcoating™ is Terumo's own biocompatible hydrophilic polymer surface coating