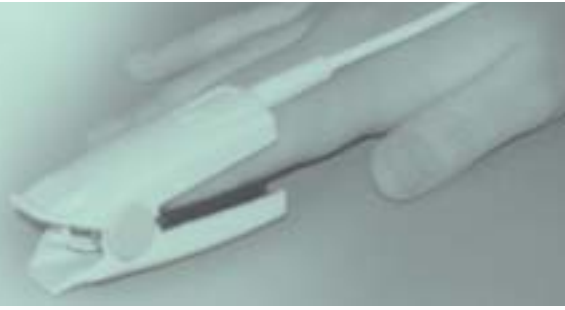
pulse oximetry



# 2100 Pulse Oximeter

- Featuring Dolphin Medical's ONE™ (Oximetry Noise Elimination) technology to reduce alarms and improve performance during motion and low perfusion
- Uses patented digital sensors - all others still use analogue sensors
- Dolphin's patented line of ONE™ sensors both amplify and digitize the signal in the sensor, resulting in a stronger and higher quality signal being received by the oximeter

**Oximetry performance is the most critical right when conditions are most difficult. That's when you can count on the Dolphin 2100 stand-alone oximeter.**


ONE

VIAMED

# 2100 Pulse Oximeter

**Power**

| | |
|---|---|
| Voltage input | 100-240 VAC, 50-60 Hz |
| Power consumption | 33 VA |
| Fuses | 2 x 2 A, 250 V, metric |
| Battery type | Sealed lead-acid |
| Battery capacity | 5 hours |
| Battery charge time | 4 hours |

**Environmental**

| | |
|---|---|
| Operating temperature | -5°C to +45°C (23°F to 113°F) |
| Storage temperature | -20°C to +60°C (-4°F to 140°F) |
| Operating humidity | 5% to 95%, non-condensing |
| Operating altitude | -304 m to 5,486 m (-1,000 ft to 18,000 ft)<br>503 mbar to 1059 mbar |

**Range**

| | |
|---|---|
| $SpO_2$ (functional) | 0% to 100% |
| Pulse rate (beats per minute) | 30-240 |
| Normal sensitivity (perfusion %) | 0.06% to 20% |
| High sensitivity (perfusion %) | 0.02% to 20% |
| Perfusion (percent) | $(AC/DC)_{905nm}$ X 100 |

**Resolution**

| | |
|---|---|
| $SpO_2$ (functional) | 1% |
| Pulse rate (beats per minute) | 1 |

**Dimensions**

| | |
|---|---|
| Size | 10 x 27 x 25 cm (4 x 11 x 10 inches) |
| Weight | 4 kg (9 lbs) |

**Trending** 24 hours of trending, 2 second resolution. Output to serial printer or other serial device.

**Modes**

| | |
|---|---|
| Averaging | Smart algorithm utilising 4 to 12 second data stream - depending on signal to noise ratio |
| Sensitivity | Normal and High |
| Patient types | Adult, Paediatric and Neonatal |

**Alarms**

Audible and visual alarms

| | |
|---|---|
| High and low saturation | 20-100% |
| Pulse rate | 30-240 bpm |

Sensor condition, system failure and low battery

**Display**

$SpO_2$, pulse rate, pleth waveform, perfusion indicator, pulse tone/ alarm volume, alarm status, trends and status messages

| | |
|---|---|
| Type | LCD |
| Pixels | 240 x 64 |
| Dot pitch | 0.53 mm |

**Standard interface for clinical use**

| | |
|---|---|
| Two LED's | 660 nm and 905 nm |

Electrically isolated RS-232 DB-9 female connector
Streaming date, time, $SpO_2$, pulse rate
Analogue output
Nurse call

**Sensors**

Reusable finger clip, model 210 (Adult and Paediatric >30 kg)
Reusable multi-site 'Y', model 320 (Adult and Paediatric >30 kg), Includes Model 921 Ear Clip accessory
Reusable multi-site 'Y', model 360 (Paediatric and Neonatal ≤ 30kg)
Disposable, model 520 (Adult and Paediatric >30 kg)
Disposable, model 560 (Paediatric and Neonatal ≤ 30 kg)

**Regulatory approvals**

U.S. patents 05575284 and 05803137
Approved for marketing by: CE, FDA, UL and CSA

CE 0301

## Accuracy

**$SpO_2$ (functional)**

| | | |
|---|---|---|
| Adult or Paediatric >30 kg | 70-100% | ±2% |
| | 0-69% | Unspecified |
| Neonate | 70-100% | ±3.5% |
| | 0-69% | Unspecified |

No motion and normal perfusion

**Pulse rate (beats per minute)**

| | | |
|---|---|---|
| Adult, Paediatric or Neonate | 30-240 bpm | ±3 bpm |

No motion and normal perfusion

**$SpO_2$ (functional)**

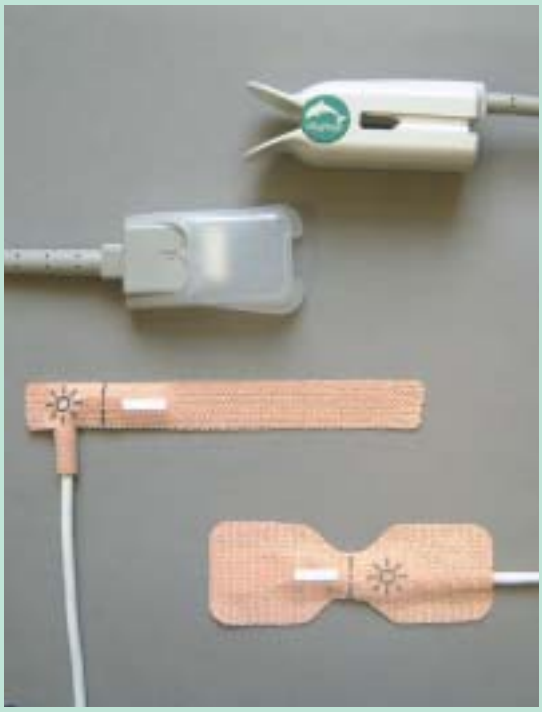
| | | |
|---|---|---|
| Adult or Paediatric >30 kg | 70-100% | ±3% |
| | 0-69% | Unspecified |

Motion or low perfusion <0.2%

**Pulse rate (beats per minute)**

| | | |
|---|---|---|
| Adult or Paediatric >30 kg | 30-235 bpm | ±5 bpm |

Motion or low perfusion <0.2%



Specifications subject to change.

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RS 25343 FS 28344


Part number: 0092110 Date: 01/03