

# N-395 Pulse Oximeter

With Oxismart XL and SatSeconds



*Setting a New Standard.*

- Reads Through Motion, Challenging Motion and Low Perfusion Conditions.
- Accurately Tracks Saturation and Pulse Rate Values.
- Reduces Nuisance Alarms.

# N-395 Pulse Oximeter

## With Oxismart XL and SatSeconds

The Nellcor® N-395 Pulse Oximeter with *Oxismart® XL* Advanced Signal Processing technology reads through challenging motion conditions,\* cutting through nonspecific noise to find the pulse and track true SpO<sub>2</sub> and pulse rate values. It gives you fast, accurate information on your neonatal through adult patients—without being a nuisance. An oximeter you can trust from Nellcor, the world leader in pulse oximetry.



### *A pulse tone you can trust.*

The N-395 uses advanced Nellcor pattern matching technology to analyze patient data, producing an audible pulse tone only upon qualification of valid pulses. This provides you with the “no pulse, no beep” behavior you expect from a pulse oximeter.

The N-395 excels in low perfusion, low signal conditions.



THE N-395 MONITOR IS DESIGNED FOR USE IN AREAS WITH HIGH MOTION OR POORLY PERFUSED PATIENTS, INCLUDING:

- Neonatal Intensive Care Unit
- Pediatric Intensive Care Unit
- General Care Floor
- Emergency Department



## Oxismart XL— The Best Just Got Better

Advanced microprocessing added to our already proven Oxismart® technology makes Oxismart XL a powerful force that filters out corrupted signals to deliver accurate pulse tone, pulse rate calculation and oxygen saturation values.

**Strength in Numbers:** Oxismart XL performs like two oximeters in one monitor. Within seconds, it locks onto a pulse signal, then multiple algorithms work together to track the pulse rate and saturation. This means you get information you can count on—even during motion, challenging motion, environmental noise and low perfusion conditions.

## The SatSeconds Breakthrough

SatSeconds™ Alarm Management is a breakthrough in clinician-programmable alarm sensitivity for pulse oximetry.

With SatSeconds, you are empowered to manage nuisance alarms caused by transient desaturations.

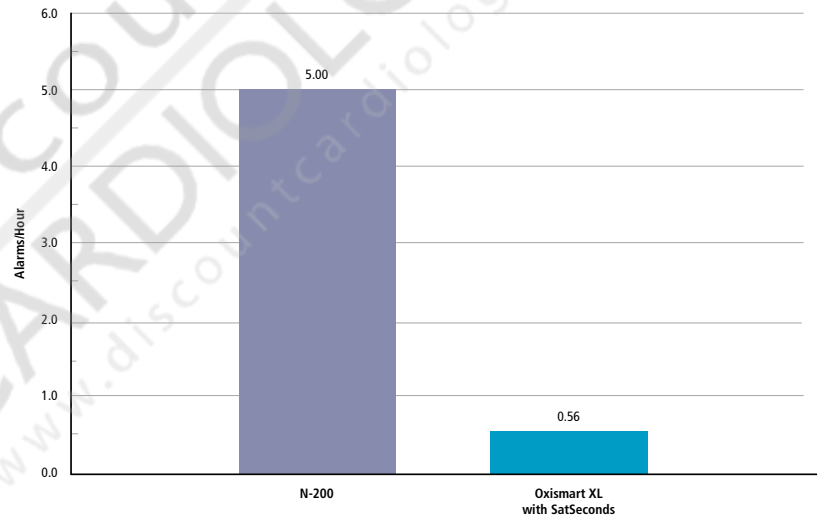
- SatSeconds is the product of time and depth a patient is outside saturation alarm limits. For example, 1 point below (or above) the alarm threshold for 10 seconds is 10 SatSeconds; 5 points below for 10 seconds is 50 SatSeconds.
- The clinician can set SatSeconds Alarm Management to trigger an alarm only when the SatSeconds "clock" reaches a user-defined limit of 0, 10, 25, 50 or 100 SatSeconds. When three or more violations occur in 60 seconds, an alarm will sound, even if the SatSeconds clock setting has not been reached. This is the SatSeconds "safety net."



Combined with SatSeconds Alarm Management, the N-395 can reduce saturation alarms by over **89%\*\***

### COMPARATIVE ALARM RATES

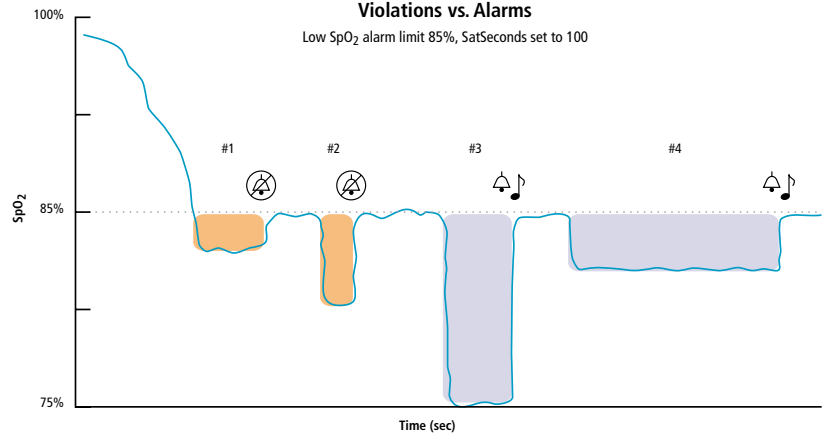
Clinical Databases: Total of 104 neonates (81.5 hrs)\*\*



\*\*Comparison of low saturation alarms: N-200 vs. N-395 with SatSeconds set to 100.

### SATSECONDS ALARM MANAGEMENT Violations vs. Alarms

Low SpO<sub>2</sub> alarm limit 85%, SatSeconds set to 100



- |  |                  |            |  |
|--|------------------|------------|--|
| #1 Saturation below 85% and above 83% for 10 seconds | → 20 SatSeconds  | → No Alarm |  |
| #2 Saturation below 85% and above 81% for 5 seconds  | → 20 SatSeconds  | → No Alarm |  |
| #3 Saturation below 85% and above 75% for 10 seconds | → 100 SatSeconds | → Alarm    |  |
| #4 Saturation below 85% and above 82% for 34 seconds | → 102 SatSeconds | → Alarm    |  |

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## FEATURES & SPECIFICATIONS

### PERFORMANCE

#### Measurement Range

SpO<sub>2</sub>: 1% to 100%  
Pulse Rate: 20 to 250 beats per minute (bpm)

#### Accuracy

Saturation (% SpO<sub>2</sub> ± 1 SD):  
Without motion:  
Adults 70% to 100% ± 2 digits  
Neonates 70% to 100% ± 3 digits  
1% to 69% unspecified  
With motion:  
Adults and Neonates  
70% to 100% ± 3 digits  
1% to 69% unspecified  
Pulse rate:  
Without motion:  
20 to 250 bpm ± 3 digits  
With motion:  
Normal physiologic range  
(e.g., 55 to 125 bpm) ± 5 digits

### ELECTRICAL

#### Instrument

Power requirements: 100 to 120 VAC, 200 to 240 VAC, 50/60 Hz, 20 VA  
Fuse Rating: 0.5 Amperes

#### Battery

Type: sealed lead-acid internal battery  
Battery capacity: minimum of 2 hours using new, fully charged battery

### ENVIRONMENTAL

#### Operating Temperature

Instrument: 5°C to 40°C

#### Transport/Storage Temperature

(In shipping carton): -20°C to 70°C

#### Operating Humidity

15% to 95% noncondensing

#### Operating Altitude

-1,280 ft to 12,000 ft  
(-390 m to 3,658 m)  
[106 kPa to 70 kPa]

### PHYSICAL CHARACTERISTICS

#### Weight

5.7 lb/2.6 kg

#### Size

3.3 in H x 10.4 in W x 6.8 in D  
(8.4 cm x 26.4 cm x 17.3 cm)

#### Equipment Classification

- IEC 60601-1
- CSA 601.1
- UL 2601-1
- IPX1 Approved

#### Emissions Compliance

- CISPR 11, Group 1, Class B equipment
- EN55011 Emissions Classification

### Output

- EIA-232 and RS-422 digital output from serial port
- Oxinet® Communications Output Protocol
- Nurse call capability
- Analog output (0-1V): SpO<sub>2</sub>, pulse rate and plethysmographic waveform

### Displays/Indicators

High quality LCD graphical screen  
Plethysmographic waveform or magnified view ("Big Numbers" with pulse amplitude indicator).  
Visual indicators: Pulse search, audible alarms silenced or off, artifact indicator, low battery and battery charging, sensor off, and SatSeconds clock.

### Alarms

Audible and visual alarms for high/low saturation and pulse rate  
SatSeconds Alarm Management settings: 10, 25, 50 and 100 or OFF  
Audible and visual warning indicators for low battery  
Audible sensor disconnect alarm  
Displayed saturation and pulse rate alarm limits

### Optional Accessories

- GCX mounting brackets
- Interface cables

- Operates in low perfusion, weak signal conditions or with environmental interference
- Monitors neonates through adults
- Bright blue LCD display for ease of viewing
- Flip feet for angle adjustment
- Choice of "Big Numbers" or plethysmographic waveform
- On-screen viewing of 48 hours of SpO<sub>2</sub> and pulse rate trends taken at 4-second intervals
- Compatible with full line of Nellcor sensors
- Sensor-off indicator
- User-configurable power-on settings
- One-touch selection of alarm limits
- Prints graphical and tabular trends

### Multiparameter Monitor Interface

Compatible host monitors include:

- Agilent CMS and V24/26
- SpaceLabs PCMS
- GE/Marquette Solar 7000 and 8000
- Datex-Ohmeda AS/3, CS/3 and S/5

### Benefits:

- Real-time patient information displayed on host system
- True physiologic waveforms displayed on host system
- Automatic upgrade of host system to Oxismart XL technology



The N-395 features a bright blue, high quality backlit graphical screen for viewing plethysmographic waveforms and up to 48 hours of patient trends.



\*Challenging motion: is of a nature and of sufficient magnitude to cause the N-3000 to be in pulse search at least 40% of the time. Under "challenging motion" conditions, the N-395 produces a 20% improvement in motion performance compared to the N-3000. All accuracy specifications are based on testing the subject monitor on healthy adult volunteers in induced hypoxia studies across the specified range. Adult accuracy is determined with Oxisensor II D-25 sensors. Neonatal accuracy is determined with Oxisensor II N-25 sensors. \*\*Refer to comparative chart.

Refer to the N-395 operator's manual for complete description, instructions, warnings, caution and specifications. Specifications are subject to change without notice.  
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