COVIDIEN

positive results for life™

Nellcor™ with OxiMax™ Technology
Product Ordering Guide
A Full Line of Oximetry Sensors and Monitors

SPECIALTY SENSORS

Forehead SpO$_2$ Sensor

For patients with low perfusion; suitable for long-term monitoring

STERILE

Forehead Sensor and Headband

Adult/Pediatric >10 kg

CATALOG NO.	MAXFAST
CASE/24	

▶ Sensors with low saturation expanded accuracy range.

SPECIALTY SENSORS

Adult/Neonatal SpO$_2$ Sensor, Nonadhesive

For patients with fragile skin; suitable for long-term monitoring

STERILE

	Adult	**Neonatal**	**Preemie**
	Adult >40 kg	Neonatal 1.5-5 kg	Preterm Infant <1.5 kg
CATALOG NO.	SC-A	SC-NEO	SC-PR
CASE/24			

SINGLE-PATIENT-USE SENSORS

Adhesive SpO$_2$ Sensors

Comfortable, form-fitting sensors; suitable for long-term monitoring

STERILE

	Adult	Neonatal/Adult	Infant	Pediatric	Adult
	Adult >30 kg	Neonatal/Adult <3 kg or >40 kg	Infant 3-20 kg	Pediatric 10-50 kg	Adult Nasal >50 kg
CATALOG NO.	MAXA/MAXAL*	MAXN	MAXI	MAXP	MAXR
CASE/24	*36" CABLE				

▶ Sensors with low saturation expanded accuracy range.

TWO-PIECE SENSORS

SpO$_2$ Sensors

Single-patient-use adhesive bandage, reusable cable

STERILE

	Adult	Neonatal/Adult	Infant	Pediatric	Sensor Cable
	Adult >30 kg	Neonatal/Adult <3 kg or >40 kg	Infant 3-20 kg	Pediatric 10-50 kg	Sensor Cable 3'
CATALOG NO.	A	N	I	P	OC-3
CASE/24 SENSORS, 1/PKG CABLE					

REUSABLE SENSORS

Reusable SpO$_2$ Sensors

Single-patient-use adhesive bandage, reusable cable

	Adult	Neonatal/Adult with Wraps	Pediatric/Infant with Wraps
	Adult >30 kg	Adult/Neonatal <3 kg or >40 kg	Pediatric/Infant 3-40 kg
CATALOG NO.	DS100A-1	OXI-A/N	OXI-P/I
CASE/24 SENSORS, 1/PKG CABLE			

REUSABLE SENSORS

Reusable Multisite SpO$_2$ Sensors

Use with wraps or clip accessories

	Multisite	Ear Clip	Pediatric Clip	Replacement Sleeves
	Multisite >1 kg	Use with SpO$_2$ sensor >30 kg	Use with SpO$_2$ sensor 3-40 kg	
CATALOG NO.	D-YS	D-YSE	D-YSPD	PDSLV

1/PKG SENSORS/CLIPS, 1 PAIR/SLEEVES

REUSABLE SENSORS

Reusable Sensor Wraps

For SpO$_2$ sensors with wraps and multisite, reusable SpO$_2$ sensors

	Wrap	Adhesive Wraps		Foam Wraps	
	For OXI-P/I, OXI-A/N, D-YS	For OXI-A/N, D-YS	For OXI-P/I, D-YS	For OXI-A/N, D-YS	For OXI-P/I, D-YS
CATALOG NO.	POSEY	ADH-A/N	ADH-P/I	FOAM A/N	FOAM P/I

CASE/24 POSEY, 100/PKG OTHERS

SENSOR EXTENSION CABLES

Sensor Extension Cables

For compatibility with specific sensor/monitor models, contact your local Covidien representative or call 800-NELLCOR.

	For Nellcor™ pulse oximeters with and without OxiMax™ technology	For pulse oximeters without OxiMax technology	For Nellcor pulse oximeters with OxiMax technology only
	4' or 8' Sensor Extension Cable	10' Patient Interface Cable	
CATALOG NO.	DEC-4/DEC-8	MC-10	DOC-10

1/PKG

For more information call 800-NELLCOR or visit www.covidien.com.

Features and Specifications

PERFORMANCE

MEASUREMENT RANGE

SpO_2: 1% to 100%

Pulse rate: 20 to 250 beats per minute (bpm)

Perfusion range: 0.03% to 20%

ACCURACY[1]

Saturation (% SpO_2 ± 1 SD)

70% to 100% ± 2 digits

60% to 80% ± 3 digits

Low perfusion: 70% to 100% ± 2 digits

Pulse rate: 20 to 250 bpm ± 3 digits

Low perfusion: 20 to 250 bpm ± 3 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: Typically 7 hours using new, fully charged battery

Charge time: 8-12 hours

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

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
- ISO 9919
- CSA 601.1
- EN/IEC 60601-1-2 (2nd ed.)
- UL 2601-1
- IPX1
- EN865

EMISSIONS COMPLIANCE

- EN55011, Group 1, Class B

OUTPUT

- EIA-232 and RS-422 digital output from serial port
- OxiNet Communications Output Protocol
- Nurse call capability
- Analog output (0-1V); SpO_2, pulse rate and plethysmographic waveform

DISPLAYS/INDICATORS

- High-quality LCD graphical screen
- Visual indicators: Pulse search, audible alarms silenced or off, interference indicator, low battery and battery charging, battery fuel gauge, sensor off, sensor disconnect, data in sensor and SatSeconds alarm management clock

ALARMS

- Audible and visual alarms for high/low saturation and pulse rate
- SatSeconds alarm management settings: 10, 25, 50, 100 or OFF
- Audible and visual warning indicators for low battery
- Audible sensor disconnect alarm and sensor off alarm
- Displayed saturation and pulse rate alarm limits
- Backup speaker with escalating alarm tones

OPTIONAL ACCESSORIES

- GCX mounting options
- Interface cables
- Carrying cases

CATALOG NO. **N600x**

† Refer to the Nellcor™ N-600x pulse oximeter operator's manual for complete descriptions, instructions, warnings, cautions and specifications. Specifications are subject to change without notice.

Features and Specifications

PERFORMANCE

MEASUREMENT RANGE

SpO_2: 1% to 100%

Pulse rate: 20 to 250 beats per minute (bpm)

Perfusion range: 0.03% to 20%

ACCURACY[1]

Saturation (% SpO_2 ± 1 SD)

70% to 100% ± 2 digits

60% to 80% ± 3 digits

Low perfusion: 70% to 100% ± 2 digits

Pulse rate: 20 to 250 bpm ± 3 digits

Low perfusion: 20 to 250 bpm ± 3 digits

ELECTRICAL

INSTRUMENT

Power requirements: 100 to 240 VAC, 25 to 39 VA

Fuse rating: Qty 2, 2A, 250 volts, slow-blow IEC (5x20 mm)

BATTERY

Type: NiMH

Battery capacity: Minimum of 8 hours using new, fully charged battery with no alarms, no serial data

ENVIRONMENTAL

OPERATING TEMPERATURE

Instrument: 10°C to 45°C

Transport/storage temperature (in shipping carton): -20°C to 70°C

Operating humidity: 15% to 95% noncondensing

Operating altitude: -1,280 ft to 18,288 ft

PHYSICAL CHARACTERISTICS

Weight: 3.07 lb (1.39 kg)

Size: 2.95 H x 9.06 W x 5.04 D (inches)
(7.5 cm x 23.0 cm x 12.8 cm)

EQUIPMENT CLASSIFICATION

- IEC 60601-1
- ISO 9919:2005
- CSA 601.1
- EN/IEC 60601-1-2 (2nd ed.)
- UL 2601-1
- IPX1

EMISSIONS COMPLIANCE

- EN55011, Group 1, Class B

OUTPUT

- EIA-232 digital output from serial port
- OxiNet Communications Output Protocol
- Nurse call capability

DISPLAYS/INDICATORS

- High-quality LED display changes from green to red during alarm conditions
- Pulse amplitude indicator (10-segment LED)
- Visual indicators: Pulse search, audible alarms silenced or off, interference indicator, battery charging, data in sensor and SatSeconds alarm management clock

ALARMS

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

OPTIONAL ACCESSORIES

- GCX mounting adapter
- Pole mount clamp
- Interface cables
- Visual alarm indicator antenna

CATALOG NO. **N560**

---

† Refer to the Nellcor™ N-560 pulse oximeter operator's manual for complete descriptions, instructions, warnings, cautions and specifications. Specifications are subject to change without notice.

NELLCOR™ N-65 HAND-HELD PULSE OXIMETER WITH OXIMAX™ TECHNOLOGY†

Features and Specifications

PERFORMANCE

DISPLAY RANGE

SpO_2: 0% to 100%

Pulse rate: 20 to 250 beats per minute (bpm)

ACCURACY[1]

Saturation (% $SpO_2 \pm 1$ SD)

70% to 100% ± 2 digits

60% to 80% ± 3 digits

Low perfusion: 70% to 100% ± 2 digits

Pulse rate: 20 to 250 bpm ± 3 digits

Low perfusion: 20 to 250 bpm ± 3 digits

POWER

REQUIREMENTS

6 V supplied by four AA-size batteries

BATTERY LIFE

Alkaline: 19 hours (typical)

Lithium: 40 hours (typical)

ENVIRONMENTAL

Storage/shipping temperature: -4°F to 158°F (-20°C to 70°C)

Operating temperature: 41°F to 104°F (5°C to 40°C # del)

Operating altitude: -1,254 ft to 9,882 ft (-382 m to 3,012 m)

Relative humidity: 15% to 95% noncondensing

PHYSICAL CHARACTERISTICS

Weight (with batteries): 0.65 lb (0.29 kg)

Size: 2.8 x 6.2 x 1.4 (inches)
        (7.3 cm x 15.8 cm x 3.5 cm)

STANDARDS

EN60601-1-2: 2001 (CISPR 11, Class B)

EN60601-1: 1990 (A1+A2)

UL 60601-1, CAN/CSA C22.2 No. 601.1

(Class: Internally Powered, Type BF)

EN60601-1-8

EN865

DISPLAYS

Oxygen saturation, pulse rate, vertical bar graph

INDICATORS

Pulse amplitude, pulse search, low battery, alarm silence, interference, data in sensor, sensor disconnect, print

OPTIONAL ACCESSORIES

• Protective boot (3 color options)

• Moisture-resistant jacket

• Carrying case

• Citizen portable infrared printer

CATALOG NO. **N65**

† Refer to the Nellcor™ N-65 pulse oximeter operator's manual for complete descriptions, instructions, warnings, cautions and specifications. Specifications are subject to change without notice.

Features and Specifications

PERFORMANCE

CAPNOGRAPH

Display range: 0 to 99 mm Hg
(0-13.2 kPa and 0-13.0 vol% at sea level)

Sampling rate: 50 ± 7.5 mL/min

Warm-up time: 30 seconds typical, reaches steady-state accuracy 20 minutes after power up

Accuracy: 0 to 38 mm Hg ±2 mm Hg
39 to 99 mm Hg ±5% of reading

Respiration rate: 0 to 150 breaths/minute

PULSE OXIMETER

Display range: SpO_2: 0% to 100%

Pulse rate: 20 to 250 beats/minute

ACCURACY[1]

Saturation (% SpO_2 ± 1 SD)

70% to 100% ± 2 digits

60% to 80% ± 3 digits

Low perfusion: 70% to 100% ± 2 digits

Pulse rate: 20 to 250 bpm ± 3 digits

Low perfusion: 20 to 250 bpm ± 3 digits

COMMUNICATION INTERFACE

RS-232 interface @ 9600 baud; full duplex serial interface via RJ-45 connector

ELECTRICAL

INSTRUMENT

Power requirements: AC input of 100 to 230 VAC @ 60/50 Hz

BATTERY

Type: Rechargeable NiMH

Battery capacity: Supplies power for 4 to 7 hours (depending on power management)

Fully recharges in approximately 4.5 hours

ENVIRONMENTAL

Operating temperature: 32°F to 113°F (0°C to 45°C)

Storage temperature: -31°F to 158°F (-35°C to 70°C)

Operating and storage:

Pressure: 430 mm Hg to 795 mm Hg

Altitude: -1,250 ft to 15,000 ft (-381 m to 4,572 m)

Humidity: 10% to 95% noncondensing

Shock test IEC 68-2-27

Sinusoidal vibration test IEC 68-2-6

Random vibration wide band test IEC 68-2-34

Drop test MIL-STD-810E, method 516.4-II

STANDARDS

- IEC 60601-1/EN 60601-1
- EN60601-1-2 second edition
- EN 864
- EN 865
- UL 2601-1
- EN 475
- EN 55011-Class B-Group 1
- CSA C22.2 No.601.1-M90

PHYSICAL CHARACTERISTICS

Weight: 1.87 lb (850 g)

Size: 8.11 in H x 3.46 in W x 2.06 in D
(206 mm x 88 mm x 53 mm)

DISPLAYED PARAMETERS

CO_2 and plethysmographic waveforms, $etCO_2$, SpO_2, pulse rate, respiration rate, trend data

DISPLAY

Graphic LCD display (128 x 64 dots) with LED backlight (contrast and backlight control); two numeric fields, three digits each, using 7-segment LED; two-color LED alarm bar

ALARMS

Adjustable alarm limits for all parameters; audio level as defined in ISO 9703-2 standard

CO_2 ACCESSORIES

Nonintubated applications:

- Smart CapnoLine®* and Smart CapnoLine®* O_2 oral/nasal circuits
- CapnoLine®* H and CapnoLine®* H O_2 nasal circuits[††]
- NIV Line nasal circuit

Intubated applications:

- FilterLine®* Set and FilterLine®* H Set,[††] combination $etCO_2$ circuit and airway adapter

[††] H indicates for humidified applications; up to 72-hour duration

OTHER ACCESSORIES

- Carrying case
- Protective boot
- Pole mount clamp
- Digital to analog converter
- Communication adapter kits
- Calibration gas kit
- External battery charger
- Extra rechargeable battery pack
- Battery pack carrying pouch
- Nurse call and remote monitoring interface kits

CATALOG NO. **N85**

† Refer to the Nellcor™ N-85 pulse oximeter operator's manual for complete descriptions, instructions, warnings, cautions and specifications. Specifications are subject to change without notice.

NELLCOR™ OXIMAX™ NELL-1™ OEM PULSE OXIMETRY MODULE

NELLCOR™ OXINET™ III REMOTE RESPIRATORY MONITORING SYSTEM

For your OEM or Nellcor™ technology solutions, please contact your local Covidien sales representative at 800-NELLCOR.

1. Adult and neonate specifications are shown for the Nellcor™ MAX-A and MAX-N sensors with OxiMax™ technology. Saturation accuracy will vary by sensor type. Refer to Nellcor Sensor Accuracy Grid Card for details.

 COVIDIEN

WWW.COVIDIEN.COM