

S/5™ Light Monitor

Portable vital signs monitoring solution for transport and bedside use



Features

- Designed for transport between care areas and for bedside observation in anesthesia, critical and stepdown care areas or in the emergency department
- Preconfigured with optimized keys to help ensure efficient monitoring, including direct access keys for the functions you use most
- Automatic numerical and graphical patient data trending of all parameters
- Optional 3-channel recorder allows you to print waveforms and trend data
- Optional back-up battery or battery module for safe and continuous monitoring
- Optional network connection to the Datex-Ohmeda S/5™ Central enables central viewing, alarms and printing, as well as real-time remote information transfer to other S/5 monitors in the network
- Datacard option for collecting data during transport and intergrating it into anesthesia and critical care systems
- Large display provides outstanding visibility and a wide range of viewing angles
- Ability to upgrade with recorder, battery module, CO₂, Datacard and network options
- Balanced handle with hooks makes it easy to lift, carry and attach to bed or wall rail

S/5 Light Monitor

Technical specifications

Display

Display size and type	9 in monochrome EL display
Display resolution	640 x 400

Dimensions and weight

Monitor (WxDxH)	325 x 160 x 210 mm / 12.8 x 6.3 x 8.3 in
Battery module (WxDxH)	290 x 150 x 40 mm / 11.4 x 5.9 x 1.6 in
Weight w/o battery	4.2 kg/9.3 lb.
Weight w/ battery	6.1 kg/13.5 lb.

General

Input voltage	12.5 V DC
Graphical trends	2, 4, 12 and 24 h
Numerical trends	All parameters, sampled every 5 min and after NIBP measurement
Alarms	Adjustable high and low alarms for HR, Resp, NIBP, SpO ₂ , Temp, Invasive Pressures and CO ₂
Safety standards	Designed to meet IEC 60601-1, CAN/CSA C22.2 No. 601.1-M90 and UL 2601-1, CE-marking according to Directive 93/42/EEC
I/O connections	RS-232 serial output, Defib. sync. signal, Nurse Call and Local printer

ECG

Measured leads	I, II or III
Frequency response	0.5 to 30 Hz (-3 dB, with 50 Hz reject filter) 0.5 to 40 Hz (-3 dB, with 60 Hz reject filter)
Pacemaker pulse detection	
detection level	5 to 500 mV
pulse duration	0.5 to 2 ms
Sweep speed (trace)	12.5, 25 or 50 mm/s

Heart rate/Pulse rate

Measurement range	30 to 250 bpm
Measurement accuracy	± 5 % or ± 5 bpm whichever is greater

Respiration

Measuring range	Impedance, 0.2 to 6 ohm
Max. base impedance	5 kohm
Respiration range	4 to 120 resp/min
Measurement accuracy	±5% or ± 5 resp/min whichever is greater
Sweep speed (trace)	slow 0.62 mm/s, fast 6.25 mm/s

Pulse oximetry (SpO₂)/Pleth

Measurement range	40 to 100%
Measurement accuracy*	100 to 80%, ±2 digits (± 1SD) 80 to 50%, ±3 digits (± 1SD) 50 to 40%, unspecified Plethysmographic pulse waveform

Non-invasive blood pressure

Measurement range	adult	25 to 260 mmHg
	child	25 to 190 mmHg
	infant	15 to 140 mmHg
Typical measurement time	adult	23 s
	infant	20 s

Temperature

Measurement range	10 to 45°C (50 to 113°F)
Measurement accuracy	±0.1°C (25 to 45.0°C) ±0.2°C (10 to 24.9°C)
Probe type	Compatible with YSI 400 series

Invasive blood pressure (F-LMP1 models only)

Measurement range	-40 to 320 mmHg
Measurement accuracy	±5 % or ± 2 mmHg
Transducer sensitivity	5 µV/V/mmHg

CO₂ Mainstream (Optional)

Measurement range	0-99 mmHg / 0-13 vol % / 0-13 kPa
Accuracy**	0-40 mmHg / 0-5.3 vol %: ±2 mmHg / ±0.3 vol % 41-76 mmHg / 5.3-10 vol %: ±5% of reading 77-99 mmHg / 10-13 vol %: ±10% of reading
Respiration range	4-150 breaths/minute
Calibration	No routine calibration required
Mainstream CO ₂ sensor weight	< 18,5 g (excluding cable)
Cable length	3 m
Warm-up time	< 80 s (from 25°C ambient)
Response time	100 ms

Pulse oximetry, Nellcor SpO₂/Pleth (Optional)

Calibration range	100 to 70%
Measurement accuracy***	± 3 digits (± 1SD) for sensor types D-YS, DS-100A, OXI-A, OXI-P/I

Plethysmographic waveform

Power Adapter

AC voltage range	220-240 V / 100-120 V ~ 50/60 Hz
Allowed AC voltage fluctuations	100 V -10% to 120 V +10%, 220 V -10% to 240 V +10%
DC output voltage	12.5 V and 18.5 V
Protection class	Class I

Light Monitor Battery Module (optional)

Type	NiCd battery
Capacity	Up to 2 hours (1 h/batt) typical on full charge at 23°C
Recharging	When connected to line power or DC (N-LPOW or N-LPOWT)
Charging time	3.5 h/battery to full capacity

Backup Battery (optional)

Type	Built-in NiCd battery
Capacity	Up to 30 min typical on full charge at 23°C
Recharging	When connected to line power or DC (N-LPOW or N-LPOWT)
Charging time	1.5 h/battery to full capacity

Transport Power Adapter (optional)

Input voltage range and fluctuations	12 Vdc -15% to 32 Vdc +10%
Output voltage	12.5 Vdc and 18.5 Vdc

* Accuracy is based on deep hypoxia studies using Datex-Ohmeda Finger Sensors on volunteered subjects. Arterial blood samples have been analyzed by a Radiometer OSM Co-oximeter. Refer to Datex-Ohmeda SatSensor directions for specific SpO₂ accuracy.

** Typical value.

*** Accuracy specifications are based on testing the monitor and sensor on healthy adult volunteers in induced hypoxia studies.

The S/5 Light Monitor is intended for patients with weight from 5 kg (11 lb) up. Respiration monitoring is intended for patients three years old and up.

For accessories, please refer to the Datex-Ohmeda Supplies and Accessories catalog.

Ordering information

	ECG	Resp	NIBP	SpO ₂	Temp	2-Min/IBP	Main St. CO ₂ (opt.)
F-LM1	■	■	■	■	■		
F-LMP1	■	■	■	■	■	■	
N-LCM							■

Ordering information for options

Description	Order code
Mainstream CO ₂ sensor	902300
Nellcor SpO ₂ measurement****	N-LNSAT
Built-in 3-channel thermal array recorder	N-LREC
Network to Datex-Ohmeda Central	N-LNET
Patient trend data collection to DataCard, PCMCIA	N-LDATA
Network and DataCard	N-LDNET
Power adapter 110/220 V	N-LPOW
Transport power adapter 12-32 V	N-LPOWT
Battery module w/ two batteries*****	F-LBAT
Built in backup battery*****	N-LBB
External battery charger w/ two batteries	N-LCHGR

**** The selection of Nellcor SpO₂ (N-LNSAT) overrides the standard Datex-Ohmeda pulse oximetry

***** You can select only either the battery module (F-LBAT), or the back-up battery (N-LBB)



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