DS-8400 General Specifications

Display		
LC-8016TC	Size	15.6 inch wide color LCD
	Resolution	1366 x 768, WXGA
	Waveforms	Max. 21
LC-8018TC	Size	18.5 inch wide color LCD
	Resolution	1366 x 768, WXGA
	Waveforms	Max. 27
Sweep Speed	Circulatory	6.25, 12.5, 25, 50 mm/s
	Respiratory	6.25, 12.5, 25 mm/s
Waveform Display	Stationary Trace Mode	

| Fibrill | Fibr

Operation

Touch Screen Method

3 Fixed Keys NIBP (Start/Stop), NIBP Auto Mode and Alarm Silence

Parameters*	
Waveform	ECG, 12 Lead ECG, IBP (max. 4/6ch), SpO2 (max. 2ch), RESP, CO2, O2, N2O, Agent, EEG (BIS™)
Measurements**	HR, ST, VPC, IBP (max. 8ch), SpO2 (max. 2ch), PI (Masimo®), SpCO/SpMet/SpHb/PVI (Masimo®, optional), RR, PR, NIBP, TEMP (max. 6ch), CO2, CO, BIS™, N2O, O2, Agent
Arrhythmia Analysis (27)	ASYSTOLE, VF, VT, SVT, RUN, Tachy, Brady, Bigeminy, Frequent, Couplet, Trigeminy, PAUSE, ST, Prolonged RR, Ext. Tachy, Ext. Brady, S Frequent, S Couplet, SVPC, Irregular RR, Triplet, R on T, Multiform, Vent Rhythm, VPC, Pacer Not Capture, Pacer Not Pacing

^{*}Depends on the device mounted to the monitor.

^{**}Masimo® measurement is available only for Masimo® model devices.

ECG (HS-8312N/M, DS-8007N/M)		
Measuring Range	Adult/Child	0, 12 to 300 bpm
	Neonate	0, 30 to 300 bpm
Measuring Accuracy	±3 bpm	
Size	1/4, 1/2, 1, 2 and 4	
HR Display	Adult/Child	6 sec
Response Time	Neonate	3 sec

Defibrillation Proof Provided

Delibrination Frontier	
SpO2 (HS-8312N/M, DS-8007N/M)	
Measuring Method	2 Wavelength Pulse Wave
Module	Nellcor™/Masimo® Technology
Measuring Range	1 ~ 100%
Measuring Accuracy	±2% (Nellcor™)/ ±2% (Masimo®)
PR Measuring	20 ~ 250 bpm (Nellcor™)
Range	26 ~ 239 bpm (Masimo®)
PR Accuracy	±3 bpm
Respiration (HS-8312N/M, DS-8007N/M)	
Measuring Method	Impedance
Measuring Range	0, 4 to 150 bpm

±3 bpm

Temperature (HS-8312N/M, DS-8007N/M)		
Measuring Method	Thermistor	
Measuring Range	32°F to 113°F / 0 to 45°C	
Measuring Accuracy	±0.4°F (between 77°F and 113°F) / ±0.2°C (between 25°C and 45°C)	
Number of Channels	Max. 6	
EtCO2 (optional)		
Sidestream (Microstream™)		
Measuring Range	0 to 99 mmHg	
	0 to 38 mmHg: ±2 mmHg	

	0.08x (reading -39 mmHg)
Mainstream (RESPIRONICS®)	
Measuring Range	0 to 150 mmHg
Measuring Accuracy	0 to 40 mmHg : ±2 mmHg
	41 to 70 mmHg : ±5%
	71 to 100 mmHg : ±8%
	101 to 150 mmHg : ±10%

39 to 99 mmHg: ±0.05 reading +



Invasive Blood Pressure (HS-8312N/M, DS-8007N/M)		
Measuring Range	-50 to 300 mmHg	
Measuring Accuracy	±1 mmHg or within ±2%	
PR Measuring	Adult	12 to 300 bpm
Range	Neonate	30 to 300 bpm
PR Accuracy	±1 bpm or ±3%	
Number of Channels	Max. 4/6 (with additional module)	

Non-Invasive Blood Pressure (HS-8312N/M, DS-8007N/M)		
Measuring Method	Oscillometric	
Measuring Range	Adult	10 to 280 bpm
	Child	10 to 180 bpm
	Neonate	10 to 130 bpm
Static Pressure Accuracy	±3 mmHg	
PR Measuring Range	40 to 240 bpm	
PR Accuracy	+2% or +2 hpm	

BIS™ (HBX-800 with BISx™, optional)		
Bispectral Index	Measurement Range	0 to 100%
(BIS TM)	Resolution	1%
Signal Quality	Measurement Range	0 to 100%
Index (SQI)	Resolution	0.1%
EMG Display Range	Tabular Trend	25 dB to 100 dB
	Bar Graph	30 dB to 55 dB
	Graphic Trend	30 dB to 80 dB
Suppression Ratio (SR)	0% to 100%	
Spectral Edge Frequency (SEF)	0.5 Hz to 30 Hz	

Printer (HR-800, built-in, optional)	
Number of Waveform	Max. 3
Printing Type	Thermal
Printing Speed	50, 25 mm/sec
Waveform Printed	ECG, RESP, SpO2, IBP, CO2, AWF, AWP, AWV and Alarm Factors

Full Disclosure

When optional CFast card (64 GB) is used, 240 hours with a maximum of 6 waveforms

Graphic Trend

24 hours / 4 selectable groups / 35 items

Tabular Trend

24 hours / 6 selectable groups / 85 items

Alarm History

1599 items

Dimensions (W x H x D) (not including the protrusion)		
DS-8410 Main Unit	14.2 x 12.2 x 10.0 inch / 360 x 310 x 255 mm	
LC-8016TC Display Unit	16.1 x 10.4 x 2.5 inch / 410 x 265 x 62.5 mm	
LC-8018TC Display Unit	18.7 x 12.1 x 2.5 inch / 475 x 307 x 62.5 mm	
Weight		
DS-8410 Main Unit	16.5 lbs / 7.5 kg	
LC-8016TC Display Unit	7.7 lbs / 3.5 kg	
LC-8016TC Display Unit	10.0 lbs / 4.5 kg	
Power		
Power Requirements	AC 100 ~ 240V, 50/60 Hz	
Power Consumption	120 VA	
Battery Operation	Max. 90 minutes with optional BTO-005 battery	

Environmental Condition

Operating Environment

Ambient Temperature	50 to 104°F / 10 to 40°C
Relative Humidity	30 to 85%
Transport / Storage	
Ambient Temperature	14 to 140°F / -10 to 60°C
Relative Humidity	10 to 95%
Safety	
General Standard	IEC 60601-1:2005 + A1:2012
EMC Standard	IEC 60601-1-2 : 2007
Electrical Shock	Class I (AC Power Operation)
Protection	Internal Powered Equipment (Battery Operation)
Conformity	CE Marking per 93/42/EEC Directive

External Connection

Serial Connector (COM x 4 ports)

DS-LAN Connector

RoHS Compliant

External Monitor Connector

Status I/O Connector (Status II)

U-Link Connector

Module LAN Connector

Extended Display Connector x 2 (with CC-84 Expansion Board)

Serial Connector (COM A and B) (with CC-84 Expansion Board)

TCP/IP Connector (with CC-84 Expansion Board)



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