

DS-8500 General Specifications

Display		
LC-8015TC	Size	15 inch TFT color LCD
	Resolution	1024 x 768, SXGA
	Waveforms	Max. 28
LC-8019TC	Size	19 inch TFT color LCD
	Resolution	1280 x 1024, SXGA
	Waveforms	Max. 28
Sweep Speed	Circulatory	6.25, 12.5, 25, 50 mm/s
	Respiratory	6.25, 12.5, 25 mm/s
Waveform Display	Stationary Trace Mode	

Operation	
Touch Screen Method	
Jog Dial with Push Key	
5 Fixed Keys	Home, Menu, Previous Display, NIBP (Start/Stop) and Alarm Silence

Parameters*	
Waveform	ECG, 12 Lead ECG, IBP (max. 8ch), 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, APNEA, NIBP, TEMP (max. 8ch), CO2, CO, BIS™, N2O, O2, Agent, MAC
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 connected 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 Response Time	Adult/Child	6 sec
	Neonate	3 sec

Defibrillation Proof Provided

SpO2 (HS-8312N/M, DS-8007N/M)	
Measuring Method	2 Wavelength Pulse Wave
Module	Nellcor™/Masimo® Technology
Measuring Range	1 ~ 100%
Measuring Accuracy	±3% (Nellcor™)/ ±2% (Masimo®)
PR Measuring Range	20 ~ 250 bpm (Nellcor™)
	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
Measuring Accuracy	±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. 8

EtCO2 (optional)	
Sidestream (Microstream™)	
Measuring Range	0 to 99 mmHg
Measuring Accuracy	0 to 38 mmHg : ±2 mmHg
	39 to 99 mmHg : ±0.05 reading + 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%

Invasive Blood Pressure (HS-8312N/M, DS-8007N/M)		
Measuring Range	-50 to 300 mmHg	
Measuring Accuracy	±1 mmHg or within ±2%	
PR Measuring Range	Adult	12 to 300 bpm
	Neonate	30 to 300 bpm
PR Accuracy	±1 bpm or ±3%	
Number of Channels	Max. 8	

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 bpm	

BIS™ (HBX-800 with BISx™, optional)		
Bispectral Index (BIS™)	Measurement Range	0 to 100%
	Resolution	1%
Signal Quality Index (SQI)	Measurement Range	0 to 100%
	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, optional)	
Number of Waveform	Max. 3
Printing Type	Thermal
Printing Speed	50, 25 mm/sec
Waveform Printed	ECG, RESP, SpO2, IBP and CO2

Full Disclosure
When optional CF card (16 GB) is used, 48 hours with a maximum of 6 waveforms

Graphic Trend
24 hours / 4 selectable groups / 38 items

Tabular Trend
24 hours / 6 selectable groups / 85 items

Dimensions (W x H x D) (not including the protrusion)	
DS-8530 Main Unit	10.4 x 10.4 x 4.6 inch / 265 x 263 x 117 mm
LC-8015TC Display Unit	15.6 x 11.7 x 2.0 inch / 395 x 297 x 50 mm
LC-8019TC Display Unit	18.4 x 14.6 x 2.2 inch / 468 x 371 x 56 mm
HS-8312N/M HS Module	3.3 x 3.9 x 7.9 inch / 85 x 100 x 200 mm

Weight	
DS-8530 Main Unit	12.1 lbs / 5.5 kg
LC-8015TC Display Unit	7.7 lbs / 3.5 kg
LC-8019TC Display Unit	13.2 lbs / 6.0 kg
HS-8312N/M HS Module	2.6 lbs / 1.2 kg

Power	
Power Requirements	AC 100 ~ 240V, 50/60 Hz
Power Consumption	150 VA max.

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 : 1988 + A1 : 1991 + A2 : 1995 IEC 60601-1 -1 : 2000
EMC Standard	IEC 60601-1-2 : 2007
Electrical Shock Protection	Class I
Conformity	CE Marking per 93/42/EEC Directive

External Connection	
Serial Connector (COM x 4 ports, COM A and B)	
CF Card Slot x 2	
DS-LAN Connector	
TCP/IP Connector	
External Monitor Output	
U-Link Connector	
Module LAN Connector	
Status I/O Connector (Status II)	
Extended Display Unit Connector x 2	



FUKUDA DENSHI USA, INC.
17725-C NE 65th Street Redmond, WA 98052
Toll Free: (800) 365-6668 / Local: (425) 881-7737 / Fax: (888) 224-7090
www.fukudaamerica.com

BIS™, BISx™, Nellcor™ and Microstream™ are registered trademarks of Medtronic.
Masimo® is a registered trademark of Masimo Corporation. RESPIRONICS® is a registered trademark of Koninklijke Philips.

The information contained in this document is subject to change without notice.
© 2022 FUKUDA DENSHI USA, INC. All rights reserved.

Document No. USRB-0124-01