

Quality and Technology ... To Touch Life

Functions and Configuration

Function

CODE

ECG - 3 lead ECG with pacemaker and electrosurgery suppression	E
Respiration - Thoracic impedance plethysmography for monitoring respiratory effort and rate	R
SpO2 - Digital pulse oximetry with plethysmographic waveform and synchronization with ECG (QRS LOCK) for more reliability in low perfusion and motion	S
FI02 - Inspired fraction of O2	F
CO2 DualCap - Mainstream and sidestream capnography for determining EtCO2, minCO2 and respiration rate	D
CO2 Mainstream - Mainstream capnography for determining EtCO2, minCO2 and respiration rate	M
CO2 Sidestream - Sidestream capnography for determining EtCO2, minCO2 and respiration rate	C
NIBP - Oscilometric Non Invasive Blood Pressure for determination of Systolic, Diastolic and Mean arterial blood pressures at programmed intervals	N
IPs - 1 to 4 channels of Invasive Pressures for monitoring dynamic and static pressures	#P
Temperature - 1 to 2 channels of YSI®400 compatible temperatures	#T
Recorder - 4 channel waveform strip chart recorder for printing graphics and alphanumeric data	Sc

Example of model number: LifeWindow 6000 with ECG, Respiration, SpO2, FI02, DualCap, NIBP, 4IPs, 2 Temps and Recorder = Model ERSFDN4P2Tsc

Technical Specifications

ECG

- Patient ECG Lead selection - DI, DII and DIII.
- Isolation - Isolated from the general ground 4KV rms / 5.5 KV peak.
- CWIR - 90 dB with patient cable distanced with 51K / 47nF.
- Input impedance - 20MΩ @ 10Hz with patient cable.

FREQUENCY RESPONSE:

- Screen
 - With filter on - 0.5 to 25 Hz.
 - Without filter (diagnostic) - 0.5 to 40 Hz.
- ECG x 1000 OUTPUT:
 - With filter on - 0.5 to 40 Hz.
 - Without filter (diagnostic) - 0.05 to 100 Hz.
- Input bias current - Any load < 200kΩ dc max.
- Electrode OFFSET - 0.5 V.
- Noise - < 20µV peak to peak referred to the input with all leads connected through a 51K / 47nF to the ground.
- Defibrillator protection - Protected against 300 joules defibrillator discharges and electrosurgery voltages.
- Leakage current - < 10µA @ 120 Vdc / 60 Hz.
- Test mode - 1 mV / 100nS @ 70 B.P.M.
- Heart rate - Range - 20 to 300 B.P.M.
 - Accuracy - 1%.
 - Resolution - 1 B.P.M.
- Sensitivity - Adult - 300 µV peak.
- Neonatal - 100 µV peak.
- QRS detection - Automatic in the selected mode.
- Pacemaker pulse rejection - 0.1 to 2 mS from 2 to 700 mV.

SpO2

- SpO2 range - 0 to 100%.
- SpO2 accuracy - 70 to 100% - 2%.
- 50 to 60% - 3%.
- 0 to 49% - not specified.
- Pulse range - 30 to 250 B.P.M.
- Pulse accuracy - 2%.
- Sensor - Finger probe, wrap probe, ear lobe and disposable wrap.
- Response time - 5 seconds.
- Settling time (average) - 15 seconds.

CO2 - Capnography DualCap or Mainstream Only

- Mainstream and Sidestream Sensors**
- Operation Principle - NDIR, single beam, isotometric method.
- CO2 Concentration Display Range - 0 - 99 mmHg.
- Respiration Rate Range - 0 - 150 breaths/minute.
- Typical Accuracy - ± 2 mmHg @ 0 - 40 mmHg.
- ± 2% of reading @ 41-70 mmHg.
- ± 10% of reading @ 71 - 99 mmHg.

Start Up Time

- < 30 sec typical in sidestream mode.
- < 80 sec typical in mainstream mode.
- Calibration - No Routine calibration required.
- Mainstream response time - 100msec (10% to 90%).
- Sidestream Rise Time - 242msec (10% to 90%).
- Sidestream Delay Time - 1.12 seconds maximum with 7' length.
- 0.05" ID. Sampling line at 175nS/min.
- Sidestream Flow Rate Range - 90, 150 and 175 ml/min.
- Flow Rate Accuracy - ± 2%, ± 10% of set value.

CO2 - Capnography Sidestream Only

- Operation Principle - NDIR, single beam, isotometric method.
- Sensor Type - Built in Sidestream sensor.
- Calibration - Zero Calibration: Typically required every two weeks depending on the amount and type of use.
- Two-Patient User Calibration - Typically required every six months depending on amount and type of use.
- CO2 Range - 0 to 99 mmHg.
- Accuracy - 0 to 40 mmHg: ± 3 mmHg.
- 41 to 70 mmHg: ± 0% of reading.
- 71 to 99 mmHg: ± 10% of reading.
- Respiration Rate Range - 1 to 99 breaths per minute.
- Start-Up Time - Less than 10 seconds to acquire CO2 waveform data.
- Less than 3 minutes to full operating specification.
- Flow Rate Range - User selectable 90, 150 and 175ml/min.

FI02

- Range - 0 to 100%.
- Accuracy - 2% (When calibrated with 21% and 100%).
- Resolution - 1%.
- Sensor - Polarographic oil class R17.
- Response time - < 10 sec @ 90%.
- Humidity - 10 to 90%.
- Pressure - 4 PSI.
- Temperature - 5°C to 50°C.
- Life of sensor - 26 months continually at 90% O2.

NIBP

- Technology - Automatic oscillometric.
- Measured parameters - Systolic, diastolic, mean pressure and pulse.
- Scale - mmHg.
- Systolic range - Adult / Pediatric: 60 to 250mmHg.
- Neonatal: 40 to 130mmHg.
- Diastolic range - Adult / Pediatric: 40 to 220mmHg.
- Neonatal: 20 to 90mmHg.
- Mean range - Adult / Pediatric: 45 to 230mmHg.
- Neonatal: 35 to 100mmHg.
- Cuff pressure range - Adult / Pediatric: 0 to 330mmHg.
- Cuff sizes - Neonatal, pediatric, adult and obese adult.

Accuracy of pressure Pressure resolution Absolute Maximum Inflation Pressure

- ± 3mmHg or ± 2% (whichever is greater).
- 1mmHg.
- Adult / Pediatric: 300mmHg.
- Neonatal: 150mmHg.
- Pulse range - Adult / Pediatric: 30 to 180 BPM.
- Neonatal: 30 to 240 BPM.
- Measurement time - Adult / Pediatric: 30 seconds typical.
- 100 seconds maximum.
- Neonatal: 30 seconds typical.
- 05 seconds maximum.

IP1, IP2, IP3 & IP4

- Frequency Response - DC to 12Hz.
- Excitation Impedance - 500 K Ω.
- Transducer Sensitivity - 50µV / V / CmHg.
- Excitation Voltage - + 5 VDC.
- Zero - Auto Zero Key.
- Temperature Drift - 0.1 mmHg / °C.
- Isolation - 4KV rms / 5.5 KV peak isolation from the general ground.
- Test Signal - 150 / 50 mmHg ± 5 mmHg.

IMPEDANCE RESPIRATION

- Technology - Impedance plethysmography.
- Excitation Current - 100µA.
- Excitation Frequency - 65 KHz.
- Max Electrode Impedance - 4 KΩ.
- Amplitude - Manual adjusted by operator.
- Range of Respiratory Rate - 4 to 150 Resp / minute.
- Sensitivity - Neonatal - 0.1 to 100.
- Adult - 0.3 to 100.
- Pacemaker Pulse Rejection - 0.1 to 0.2ms from ± 2 to ± 700mV.

TEMPERATURE (2 channels)

- Sensor - YSI® 400 (T) series comp. thermistor.
- Range - 0°C to 50°C.
- Accuracy - 0.1°C from 25°C to 45°C.
- Isolation - Isolated from the general ground.
- Leakage current - > 4 KV rms / 5.5 KV peak.
- < 10µA @ 120 Vdc / 60 Hz.

GENERAL SPECIFICATIONS

- Display Type - 600 x 800 12.1" SVGA Active Matrix TFT Color LCD.
- Mains Voltage - Automatic selection.
- 120Vac to 240Vac (50 / 60 Hz).
- Battery - 2 internal sealed rechargeable batteries.
- Relative humidity - 30 to 75% (non-condensing).
- Dimensions - W 13.6" (345) x H 9" (229) x D 7" (180) (mm).
- Weight - 18 Lbs. (8kg).
- Safety - Meets IEC 601-1-1 and IEC 601-1-2.



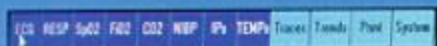
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Graphical User Interface (GUI) is sophisticated yet user friendly

Tabular and graphical trends of all parameters

Easy setup with pop up windows for all parameters



Digicare's LifeWindow 6000 is a revolutionary patient monitor. The majority of other monitors' user interface is by means of scrolling dials where you must scroll through several options before reaching the function you wish to set. On the LifeWindow 6000, the user interface is a highly intuitive graphical user interface (GUI), similar to the popular Windows®. This makes our unit extremely user friendly yet capable of having several features not found on other monitors. Navigation through the menus is very easy and straightforward by means of an ergonomic pointer, called Ergopointer. It allows the user to go directly to the functions to be set and eliminates the need for many buttons and scroll dials. LifeWindow 6000 includes the most important vital signs available in today's modern medicine, guarantying patient safety to a maximum level. All waveforms, numerical data, trends, patient data and modes of operation are displayed in a logical and concise way on a high resolution, crystal clear, 12.1" active matrix (TFT) screen. The unit has 6 real-time waveforms that can easily be set to display any graphic vital sign in any sweep speed from 6.25 to 50 mm/S in single trace or cascade mode, color and format. The foundation for all features available in this monitor lies in its graphical, network-ready, multimedia operating system, the LifeWindowOS. It includes several built-in networking protocols, including Ethernet and Internet protocol. The revolution of the information age is computer networking, a key element in telemedicine. Patient data available on the networks will be an important tool for physicians to keep a constant watch over their patient's care. Contact us today to learn more about this resourceful patient monitor and how it can help you improve the quality of care delivered to your patients.

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- Electrode OFFSET - 0.5 V.
- Noise - < 20µV peak to peak referred to the input with all leads connected through a 51K / 47nF to the ground.
- Defibrillator protection - Protected against 300 joules defibrillator discharges and electrosurgery voltages.
- Leakage current - < 10µA @ 120 Vdc / 60 Hz.
- Test mode - 1 mV / 100mS @ 70 BPM.
- Heart rate - Range - 20 to 300 BPM.
 - Accuracy - 1%.
 - Resolution - 1 BPM.
- Sensitivity - Adult - 300 µV peak.
- Neonatal - 100 µV peak.
- QRS detection - Automatic in the selected mode.
- Pacemaker pulse rejection - 0.1 to 2 mS from 2 to 700 mV.

SpO2

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- Typically required every six months depending on amount and type of use.
- Two-Patient User Calibration - 0 to 99 mmHg.
- CO2 Range - 0 to 42 mmHg ± 3 mmHg.
- Accuracy - 41 to 70 mmHg ± 0% of reading.
- 77 to 99 mmHg ± 10% of reading.
- Respiration Rate Range - 1 to 99 breaths per minute.
- Start-Up Time - Less than 10 seconds to acquire CO2 waveform data.
- Less than 9 minutes to full operating specification.
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FI02

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- Resolution - 1%.
- Sensor - Polarographic oil class R17.
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- Cuff sizes - Neonatal, pediatric, adult and obese adult.

- Accuracy of pressure - ± 3mmHg or ± 2% (whichever is greater).
- Pressure resolution - 1mmHg.
- Absolute Maximum Inflation Pressure - Adult / Pediatric: 300mmHg.
- Neonatal: 150mmHg.
- Pulse range - Adult / Pediatric: 30 to 182 BPM.
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