Technical Specifications

Safety
ISO 13485:2003 approved
CE marking according to MDD93/42/EEC
Degree of protection against harmful ingress of water: IP X 1

Dimension and Weight
Dimension:	13.5in x 11.5in x 6.5in 344mm x 291mm x 165mm
Net Weight:	8.6lbs with battery (3.9kg)
Gross Weight:	18lbs (8.2kg)

Operation Environment
Power:	AC100-250V, 50/60Hz
Temperature:	41°F-104°F (5°C-40°C)
Humidity:	15%-93%

Patient Range
Patients:	Adult, Pediatric, Neonate

Performance Specifications
Display for 780:	12.1" color TFT touch screen
Display for 780Plus:	15" color TFT touch screen
Resolution:	800x600
Trace:	maximum 8 waveforms display
Sweep Speed:	6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
Indicator:	Power, Battery, Alarm lights and QRS, Operating Key, Alarm sounds
Interface:	Parameter cable interface AC power input socket Network interface DB9 interface External VGA interface Nurse call interface USB port SD card socket
Battery:	Lithium polymer plug & play rechargeable battery (4 hours of continuous working time)
Trend Time:	120 hours
Alarm:	User-adjustable high and low limits for audible and visual alarm
Networking:	Connects to central monitoring system (wired and wireless)
Recorder (Optional):	Built-in, thermal array, 2 channels
Record Mode:	Manual, Upon alarm, Continual, Time–defined
Record Speed:	25mm/s, 50mm/s
Paper Width:	1.97in (50mm)

ECG-Cardio Tee™ 12-Leads ECG Analysis
Lead Selection:	3-lead (I, II, III) 5-lead (I, II, III, V, aVR, aVL, aVF) 12-lead (I, II, III, V1-V6, aVR, aVL, aVF)
Gain Selection:	X1/4, X1/2, X1, X2, X4, Auto
Sweep Speed:	6.25mm/s, 12.5mm/s, 25mm/s, or 50mm/s
Filter Bandwidth:	Mon: 0.5-40Hz DIA: 0.05-130Hz OPE: 1-20Hz
HR Range:	Adu: 15-300bpm Ped/Neo: 15-350bpm
HR Resolution:	1bpm
HR Accuracy:	±1% or ±2bpm
HR Alarming Time:	<12s
ST Segment Detection Alarm:	-0.20mV-0.20mV (default)
Arrhythmia Analysis:	Yes
Alarm:	User-adjustable high, mid, low limit ranges
Anti-Electrical Interference:	Line frequency, electro-surgery and defibrillation protection, pacemaker detection

Respiration
Measurement Method:	Thoracic impedance
RR Range:	Adu/Ped: 0-120rpm Neo: 0-150rpm
RR Resolution:	1rpm
RR Accuracy:	±1rpm
Apnea Alarm:	Yes, 10-40s
Alarm:	User-adjustable high and low limits

Lutech SpO_2
Saturation Range:	0-100%
Saturation Resolution:	1%
Saturation Accuracy:	±2% (70-100%, Adu/Ped) ±3% (70-100%, Neo) Unspecified (0-69%)
PR Range:	20-250bpm
PR Accuracy:	±3bpm (non-motion) ±5bpm (motion)
Alarm:	User-adjustable high, mid, low limit ranges

Masimo SpO_2 (Optional)
Saturation Accuracy:	±2% (70-100%, Adu/Ped) ±3% (70-100%, Neo) Unspecified (0-69%)
PR Range:	25-240bpm
PR Accuracy:	±3bpm (non-motion) ±5bpm (motion)

Nellcor SpO_2 (Optional)
Saturation Range:	0-100%
Saturation Accuracy:	±3% (70-100%) Unspecified (0-69%)
PR Range:	20-250bpm
PR Accuracy:	±3bpm

AcuTee™ NIBP
Measurement Method:	Automatic oscillometric
Measurement Modes:	Manual, Automatic
Auto Mode Times:	Adjustable 1-480min
Pressure Types:	Systolic, Diastolic, Mean
Pressure Units:	mmHg/kPa selectable
Pressure Range:	
Range for Systolic Pressure:	
	Adu: 40-270mmHg
	Ped: 40-200mmHg
	Neo: 40-135mmHg
Range for Diastolic Pressure:	
	Adu: 10-215mmHg
	Ped: 10-150mmHg
	Neo: 10-100mmHg
Range for Mean Pressure:	
	Adu: 20-235mmHg
	Ped: 20-165mmHg
	Neo: 20-110mmHg
Alarm Type:	Systolic, Diastolic, Mean
Pressure Accuracy:	±5mmHg
Pulse Rate Range:	40-240bpm
Over-Pressure Protection:	Adu: 300mmHg Ped: 240mmHg Neo: 150mmHg

Temperature
Temp Units:	°C/°F selectable
Temp Range:	32-122°F (0-50°C)
Temp Resolution:	0.1°F (0.1°C)
Temp Accuracy:	±0.3°F (±0.1°C)

IBP (Optional)
Measured Pressures:	P1, P2, ART, PA, CVP, LAP, RAP, ICP
Pressure Units:	mmHg/kPa selectable
Pressure Range:	0-300mmHg
Pressure Accuracy:	±2% (100-300mmHg) ±4% (0-100mmHg)

CO_2 (Optional)
Measurement Method:	Non-dispersive infrared (NDIR)

Respironics CO_2
Mainstream (Capnostat 5):	
CO_2 Range:	0-150mmHg (at 760mmHg) 0-19.7% (at 760mmHg)
CO_2 Accuracy:	±2mmHg (0-40mmHg) ±5% of reading (41-70mmHg) ±8% of reading (71-100mmHg) ±10% of reading (101-150mmHg)
RR Range:	0-150rpm
Sidestream (LoFlo):	
CO_2 Range:	0-150mmHg (at 760mmHg) 0-19.7% (at 760mmHg)
CO_2 Accuracy:	±2mmHg (0-40mmHg) ±5% of reading (41-70mmHg) ±8% of reading (71-100mmHg) ±10% of reading (101-150mmHg)
RR Range:	2-150rpm

PhaseIn CO_2 Mainstream (IRMA) or Sidestream (ISA)
CO_2 Range:	0-15vol%
CO_2 Accuracy:	±2mmHg (0-40mmHg)
RR Range:	0-150rpm

PhaseIn Anaesthetic Gas (Optional)
Measurement Method:	Non-dispersive infrared (NDIR)
Mainstream (IRMA AX+):	
AG Range:	CO_2: 0-10vol% N_2O: 0-100vol% HAL: 0-8vol% ISO: 0-8vol% ENF: 0-8vol% SEV: 0-10vol% DES: 0-22vol%
AG Accuracy:	CO_2: ±0.3vol%+2% of reading N_2O: ±0.2vol%+2% of reading HAL: ±0.15vol%+5% of reading ISO: ±0.15vol%+5% of reading ENF: ±0.15vol%+5% of reading SEV: ±0.15vol%+5% of reading DES: ±0.15vol%+5% of reading
RR Range:	0-150rpm
Sidestream (ISA AX+/OR+):	
AG Range:	CO_2: 0-10vol% N_2O: 0-100vol% HAL: 0-8vol% ISO: 0-8vol% ENF: 0-8vol% SEV: 0-10vol% DES: 0-22vol% O_2: 0-100% (for ISA OR+ only)
AG Accuracy:	CO_2: ±0.2vol%+2% of reading N_2O: ±0.2vol%+2% of reading HAL: ±0.15vol%+5% of reading ISO: ±0.15vol%+5% of reading ENF: ±0.15vol%+5% of reading SEV: ±0.15vol%+5% of reading DES: ±0.15vol%+5% of reading O_2: ±1vol%+2% of reading (for ISA OR+ only)
RR Range:	0-150rpm

Cardiac Output (Optional)
Measurement Method:	Thermodilution
C.O. Range:	0.1-20L/min
C.O. Resolution:	0.1L/min
C.O. Accuracy:	±5% or ±0.1L/min
Blood Temp (BT) Range:	77-109.4°F (25-43°C)
Injection Temp (IT)Range:	32-77°F (0-25°C)
BT/IT Resolution:	0.1°F (0.1°C)
BT/IT Accuracy:	±0.3°F (0.1°C, no sensor)

Impedance Cardiography (Optional)
Measurement Method:	Thoracic bio-impedance
C.O. Range:	1.4-15L/min
C.O. Accuracy:	Unspecified
Stroke Volume Range:	5-250mL
Stroke Volume Accuracy:	Unspecified
HR Range:	40-250bpm
HR Accuracy:	±2bpm

Index of Consciousness (Optional)
qCON Range:	0-99
SQ I Range:	0-100%
EMG Range:	0-100dB
ESR Range:	0-100%
Total Index Update Delay:	8s

Standard Configuration
ECG/HR, Lutech SpO_2, NIBP, Resp., Temp., and Pulse Rate.

Optional Configuration
Nellcor SpO_2, Masimo SpO_2, IBP, Respironics or PhaseIn CO_2 (Mainstream or Sidestream), PhaseIn Anaesthetic Gas (Mainstream or Sidestream), Cardiac Output, Impedance Cardiography, Index of Consciousness, Recorder, Central Monitoring System (LAN or Wireless, HL-7).

Standard Accessories
10-lead ECG cable set w/ electrodes (Adu), Lutech SpO_2 sensor (Adu) with extension cable, NIBP cuff with extension tubing (Adu), Skin temperature probe (Adu), Stylus pen, Battery, Power cord, Grounding cable, User manual.

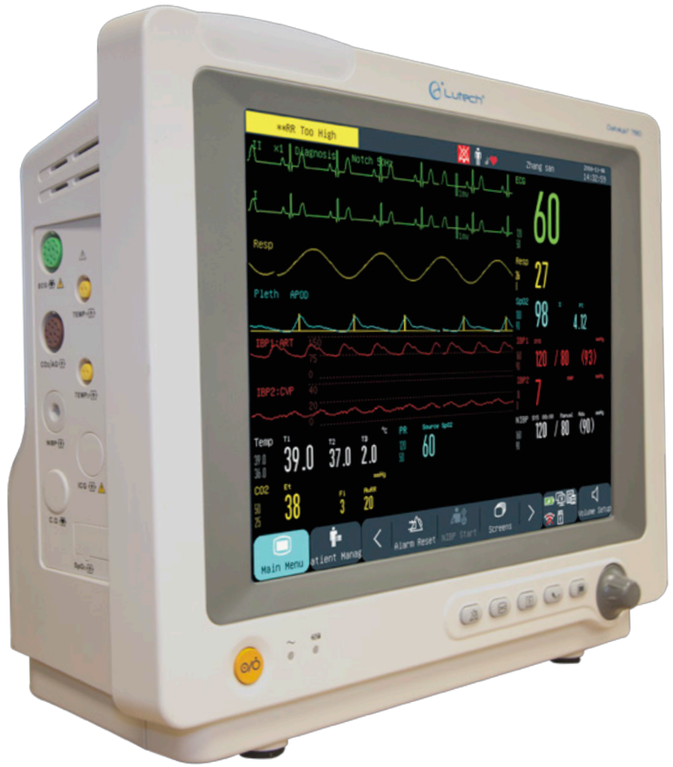
LUTECH INDUSTRIES INC.

105 Remington Blvd., Suite C, Ronkonkoma, NY 11779 U.S.A.

Ph: 631-676-7432 Fx: 631-619-0723 Website: www.lutechmedical.com E-mail: info@lutechmedical.com

Lutech®

Your Partner in Advancing Medical Care



Datalys™ 780

Intensive Care Monitor

CE 0434

Datalys™ 780

Intensive Care Monitor...

When every second matters!

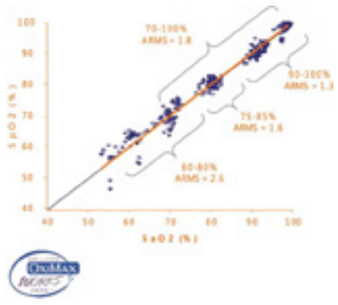
The Datalys™ 780 uses CardioTec™ ECG technology, world leading OxiMax technology, high precision AcuTec™ hypertension monitoring technology as a standard configuration. Also incorporated are the world's best medical technologies for SpO_2, ICG, $EtCO_2$, Anesthesia Gas Monitoring from some of the world's best OEM technology providers, such as NELLCOR, RESPIRONICS, ARTEMA & BIOZ. In essence, the Datalys™ 780 provides medical professionals with powerful monitoring options and functionalities that match the demands of a wide range of care in any hospital environment.

ECG

- CardioTec™ 12-lead ECG waveform synchronously display High Precision ECG measurement technology, assists in precisely diagnosis of patients.
- CMRR≥105dB, outstanding ECG anti-interference capability.
- Support arrhythmia analysis & alarm review.

SpO_2

Advanced SpO_2 technology, OxiMax®
Unique sensor with Digital Memory Chip. Every sensor is calibrated to it's own specific needs. Desaturation Event Reports in the sensor.
Unique LoSaT™ provides highest accuracy range, expanding it from 60% to 100%
Exclusive SatSeconds™ alarm management system lowers false alarms and workload for users.



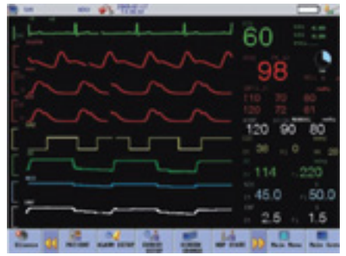
- IPX1 Level Waterproof

- Nuevo diseño de interfaz estéticamente agradable.

- USB, VGA, network and multifunctional interface

- Wall mount, rolling stand/trolley

- 4400mAh Lithium polymer battery, over 4 hours of continuous work time



Anesthetic Gas

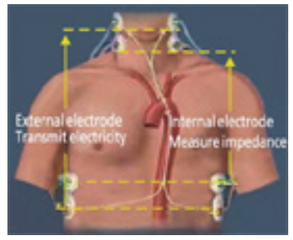
In collaboration with Phase-in of Sweden, the Datalys™ 780 adopts the advanced anesthetic gas module for monitoring 8 types of gas (O_2, CO_2, N_2O, ENF, ISO, DES, SEV, HAL). The module includes automatic recognition of the anesthetic gas, short warm-up time, long service life and support for the MAC value (minimum alveolar concentration).

$EtCO_2$

- The Datalys™ 780 offers the plug and play $EtCO_2$ from Respironics.
- Select the Capnostat 5 mainstream sensor for optimal performance in monitoring intubated patients.
- Small, durable and lightweight, the mainstream sensor provides accurate and reliable monitoring for all intubated patients, from neonates to adults.
- No calibration is required
- Select the LoFlo sidestream sensor for monitoring non-intubated patients.
- Flexible and compact, the LoFlo CO_2 sensor provides consistent and reliable monitoring of adult, pediatric
- Sample rate ≤ 50ml/min (micro-stream).

Non-invasive Hemodynamic

- Collaborating with US BIOZ. The Datalys™ 780 offers impedance cardiography for non-invasive continuous hemodynamic monitoring
- Micro-signal transmit through disposable electrodes.
- Measurement and display of ICG.
- DISQ® technology processes impedance signal variation caused by variations in blood volume and Blood flow velocity from heartbeat to heartbeat.
- Variation of impedance is applied to non-invasive Z MARC™ algorithm for acquiring SV, CO, SVR, contractility.



Intelligent Alarm

- I-KloK™ intelligent alarm management allows auto identification of alarm level.
- Self adjust proper alarm time to reduce false alarms.