



Committed to Excellence

Virgo

multiparameter monitor

12.1" color TFT LCD display, flat and wide. Inexpensive and reliable device

basic configuration

ECG+ SpO2 + Non-Invasive Pressure (NIBP) + 2 temperature sensors + ventilation; lithium ion battery

optional features

Pulse Oximetry (SpO2) Masimo, Invasive Pressure (IP), Capnography (CO2), Thermal Imprint, Touch Screen, Central Monitoring System (CMS)



7-lead ECG

Review				
	Graphic	Tabular	NIBP	Event
Time	SPO2	PR	T1	
[09]11:28:40	98	60	36.0	
[09]11:28:39	98	60	36.0	
[09]11:28:38	98	60	36.0	
[09]11:28:37	98	60	36.0	
[09]11:28:36	98	60	36.0	
[09]11:28:35	98	60	36.0	

Tabular and graphic representation of trends

- 240** Hours of extended trend rendering
- 60** Minutes of Brief Trend Representation
- 1000** NIBP measurements
- 200** alarm activations



Virgo

multiparameter monitor



- 8 wave oscilloscope, ECG up to 12 leads
- Precise monitoring of hemodynamics, anesthetic dose, oxygenation and ventilation
- pacemaker detection
- Analysis of the ST segment and arrhythmias
- oxycardiography
- Night mode, sleep mode, venipuncture mode
- Different forms of arming
- Central monitoring system (CMS) with wired or wireless connection to the hospital information system (HIS), compatible with the HL7 protocol
- Multifrequency measurement of SpO2 (sonication)
- Modified Early Warning Score (MEWS)
- Tabular and graphic representation of trends (120 hours)
- rechargeable lithium ion battery
- Viewing the complete ECG record of each patient in a 48 hour period

Screen:
 12.1" TFT LCD screen
 Resolution: 800 x 600 (1024 x 768 [optional])
 Number of strokes: 8; up to 12 leads on ECG Dimensions: 310 x 292 x 174 mm (W x H x D)
 Weight: <4 kg with standard configuration LAN: 1 RJ45 port WLAN standard: IEEE 802.11 b/g/n protocols USB: 2 USB ports

Leads: 3, 5, 12 (optional)
 ECG recording: 2, 7 or 12 channels
 Measurement sensitivity: 2.5 mm/mV (x0.25); 5mm/mV (x0.5); 10mm/mV (x1.0); 20mm/mV (x2.0)
 Wave recording speed: 3.125 mm/s; 6.25mm/s; 12.5mm/s; 25mm/s; 50mm/s
 Bandwidth: Diagnostic Mode: 0.05 Hz-100 Hz
 Monitoring mode: 0.5Hz-40Hz
 Surgical mode: 1 Hz-20 Hz
 Intense filtered mode: 5 Hz-20 Hz
 Common Mode Rejection Ratio (CMRR): >100 dB Bandstop Filter: The bandstop filter (50/60 Hz) can be turned on or off.
 Differential input impedance >5 M Electrochemical polarization voltage: ±400 mV Heart rate (HR) range: 0-150 bpm ST segment measurement range: -1.0 to +10 mV Initial polarity recovery time: <3 s after debrillation (in surgical and monitoring modes)

heart rate

Range: 30-300 bpm
 Resolution: 1 bpm ±2
 Accuracy: bpm (at rest); ±5 bpm (in motion)
 Update rate: 1 s

Measurement method: Thoracic electrical bioimpedance
Operating modes: Automatic/Manual
Measuring electrode: electrode I, II
Measurement interval: Adults 0-120 rpm
 Children/Neonates: 0-150 rpm
Resolution: 1rpm
Apnea alarm delay: 10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s
Wave amplification: x0.25; x0.5; x1; x2
Breathing Impedance Range: 0.5-5
Initial impedance: 500-4000
Magnification: 10 degrees
Measurement speed: 3.125 mm/s; 6.25mm/s; 12.5mm/s; 25mm/s

Accuracy: ±0.1°C or ±0.2°F
Measurement range: 5-50°C (41-122°F)
Resolution: 0.1°C
Parameters: T1, T2 and TD

on No

Measurement method: automatic oscillometry
Operating mode: manual, automatic, continuous
Measurement unit: mmHg and kPa can be chosen
Typical measurement time: 20-40 s
Measurement type: systolic, diastolic and average blood pressure
Measurement interval (mmHg):
 Systolic blood pressure interval: Adults 40-280
 Children 40-200
 Neonates 40-135
 Diastolic blood pressure interval: Adults 10-210
 Children 10-150
 Neonates 10-95
Average Voltage Range: Adults 20-230
 Children 20-165
 Neonates 20-105

Measurement accuracy
 Maximum error of the mean: ±5 mmHg
 Maximum standard deviation: 8 mmHg
Resolution: 1mmHg
Interval: 1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 180, 240, 480 min
Protection against excess pressure: double protection (software and hardware)
Blood pressure monitor pressure range: 0-300 mmHg

Measurement range: 0-100%
Resolution: 1%
Perfusion index measurement
Accuracy: ±2% (70-100%, adult/pediatric patients); ±3% (70-100%, neonates); 0-69% (not specified)
Update rate: 1 s

Measurement range: 0-100%
Resolution: 1%
Accuracy: ±2% (70-100%, adult/pediatric patients, at rest, low perfusion); ±3% (70-100%, neonates, at rest); ±3% (70-100%, moving); 0-69% (not specified)
Update rate: 1 s

Invasive pressure (optional)

Channels: 2 or 4 channels
Intra-arterial: 0 to 300 mmHg
Pulmonary artery: -6 to 120 mmHg
CVP/PAD/PAI/PI: -10 to 40 mmHg
Measurement range: P1/P2 -50 to 300 mmHg
Resolution: 1mmHg
Accuracy: ±2% or ±1 mmHg, whichever is greater (without sensor)
Sensitivity: 5µV/mmHg/V
Impedance range: 300 to 3000

built-in, thermal
Horizontal resolution: 16 dots/mm (print speed: 25 mm/s)
Vertical resolution: 8 dots/mm
Print speed: 25mm/s; 50mm/s
Number of measurement channels: 3

Power: AC 100-250V, 50-60Hz
Temperature: 5-40°C
Humidity: <80%
Patients: adults, children and neonates