NIHON KOHDEN

LIFE SCOPE®
G5 MAX BEDSIDE MONITOR

NEXT GENERATION MONITORING SYSTEM, ALL-IN-ONE MONITOR

CSM-1502

The Life Scope G5 Max is a bedside monitor with a 15.6" touch screen display that offers features to support mid- to high-acuity clinical settings, where clinicians need an all-in-one system with quick access to multiple configurations and trend analysis.

MORE DATA INTEGRATION

01. Offers a complete data record, including multiwaveform, multi-parameter full disclosure
02. Includes 12-lead ECG monitoring with printing capabilities and visualization that may help identify changes in cardiac functions, such as rhythm and rate, using advanced algorithms
03. Combines vital signs patient monitoring and 8-channel neurology monitoring
04. Integrates with third party devices such as ventilators, anesthesia systems, and continuous cardiac output devices

MORE EFFICIENCY

01. Provides seamless patient monitoring work flow with one admission and discharge across the entire hospital stay
02. Employs intuitive user interface and quick access keys to data and functions
03. Includes customizable escalation latching and delayed alarm functionality to help reduce alarm fatigue
04. Offers flexible and configurable system for wall mount or roll stand use

MORE INSIGHTFUL

01. Includes advanced features, like drug and pulmonary calculations, as well as hemodynamic graphing, aiding clinicians in closer monitoring of their patients
02. Offers advanced ECG analysis with advanced atrial fibrillation algorithm, enhanced review capability ST analysis, event recall and QTc/QRSd
03. Offers an overview of patient health status, including a comprehensive histogram, advanced interbed, HiQ View, and car seat report
04. Employs large frameless display with excellent viewing capabilities allowing more patient data to be presented including G-Scope mini trends

LIFE SCOPE®
G5 MAX BEDSIDE MONITOR SPECIFICATIONS

DISPLAY

Display Size/Type	**CSM-1502 (CU-152R):** 15.6" color direct bond TFT LCD
Resolution	**CSM-1502:** 1366 × 768
Characteristics	True Flat, tempered glass medical certified, capacitive touch screen with up to 15 function soft keys and 3 quick recall screen configurations
Number of Traces	Up to 15 traces (30 traces on two displays) moving or fixed method
Waveforms	Up to 15 traces (30 traces on two displays) moving or fixed method ECG (up to 12), respiration, IBP (up to 8), SpO_2 pulse wave, CO_2, BIS-EEG, EEG* (up to 2 traces), vent PAW, vent Flow, and CO Thermodilution curve. When gas is monitored: O_2 concentration curve, CO_2 concentration curve, anesthetic agent concentration (Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane*) Analog input.
Sweep Speed	**Normal sweep speed:** 25 mm/s, 50 mm/s **Slow sweep speed (respiration):** 1.56 mm/s, 6.25 mm/s, 12.5 mm/s, 25 mm/s
Numeric Data Display	Heart rate, VPC rate, QTc and QRSd, ST level, RR respiration rate, NIBP (systolic, diastolic, map), IBP (systolic, diastolic, mean), SpO_2, SpO_2-2, delta SpO_2, pulse rate, temperature, CO, CI, Ti (injectate tempera- ture), Tb (blood temperature), O_2 concentration, $EtCO_2$, BIS, inspired/ expired N_2O concentration, inspired/expired CO_2, inspired/expired O_2 concentration, inspired/expired anesthetic agent concentration (Halothane, Isoflurane, Enflurane, Sevoflurane, Desflurane), MAC (minimum alveolar concentration), Ppeak (peak airway pressure), PEEP (positive end expiratory pressure), Pmean (mean airway pressure), MV (minute volume), TVi (inspiratory tidal volume), TVe (expiratory tidal volume), C (compliance), R (airway resistance), Ri (inspiratory airway resistance), Re (expiratory airway resistance), I:E (inspiration expiration ratio), SEF (90 or 95% spectral edge frequency), MDF (median frequency), power ratio of frequency (% δ, % θ, % α, % β, % γ), PPF (peak power frequency), TP (total power), power of frequency (Abs δ, Abs θ, Abs α, Abs β, Abs γ), CSA, power ratio of frequency, DSA,TOF cnt, TOF rat, Tw 1 to Tw4 (Twitch height), DBS (double burst stimulation), TET (tetanic stimulation) PTC (post tetanic count stimulation). With PiCCO monitor: PCCO, PCCI, $tcPO_2$, $tcPCO_2$, PPV, SPV. With INVOS monitor: rSO_2, SSI indicator, BL (baseline), AUC (area under the curve), change rate. With CCO monitor: CCO, CCI, SvO_2, $ScvO_2$, SV, SVI, SVV, SVR, SVRI, RVEF, EDV, EDVI, ESV, ESVI, DO2, VO_2, O2EI, SaO_2, HRV, CF.

ALARMS

Alarm Items	Vital sign, arrhythmia, technical, operational, interbed
Alarm Levels	**Crisis:** red blinking **Warning:** yellow blinking **Advisory:** yellow or blue light
Alarm Indication	Alarm indicator (360° visibility) highlighted message, alarm sound
Alarm Suspend	1, 2, or 3 min
Alarm Master	Adult and Pediatric up to 4, Neonatal up to 6

STORED PATIENT DATA

Trendgraph	**Trend parameters:** up to 9 for each trend graph (up to three); **Trend display time:** Up to 72 hours (short trend for the last 30 minutes on main screen)
Vital Signs List	Three lists of up to 15 parameters each for up to 72 hours; **Periodic:** up to 1 per minute for 72 hours
NIBP	**Number of entries:** 1,024 files
HEMO List	**Number of entries:** 1,024 files
Full Disclosure	**Storage time:** up to 72 hours; **Number of waveforms stored:** 5 (max)
ST Recall	**Number of files:** 4,320 files (1 per minute for 72 hours) for all monitoring leads
History	16,384 files (Alarm & Arrythmia recall)
12-Lead Interpretive Recall	**Number of files:** 18 files
Storage Capacity	72 Hours (OCRG/Hemodynamics/Trend/aEEG)

RECORDER (OPTIONAL)

Recording Method	Thermal array recording
Number of Channels	3 traces (max)

PARAMETERS

Leads	3,6 or 10-lead ECG cable for I, II, III, aVR, aVL, aVF, V1 to V6
ECG	**Number of ECG waveforms channels:** up to 12; **Frequency response:** diagnosis mode - 0.05 to 150 Hz, ST mode -0.05 to 18 Hz, monitor mode -0.3 to 40 Hz, maximum filter mode -1 to 18 Hz; **Heart Rate Counting range:** 0, 15 to 300 beats/min; **Arrhythmia analysis method:** multi-template software algorithm; **VPC counting rate:** 0 to 99 VPCs/min; **Arrhythmia alarms:** Asystole, VF, VT, V Rhythm, V Brady, EXT Tachy, EXT Brady, A-Fib, End A-Fib, VPC Run, Couplet, Early VPC, Bigeminy, Trigeminy, Freq VPC, Prolonged RR, SV Tachy, Tachycardia, Bradycardia, VPC, Multiform, Irregular RR, No Pacer Pulse, Pacer Non-Capture, Pause
ST Level Measurement	**Number of measurement channels:** Up to 12; **Measuring range:** ±2.5 mV
Respiration	**Measuring range:** 0 to 150 breaths/min (Impedance)
SpO_2	**Measuring Technology:** Nihon Kohden, Masimo or Nellcor; **Measuring Display Range:** 0 to 100% (70 to 100% at specified accuracy); **Pulse rate from SpO_2 Range:** 20 to 300 (varies by SpO_2 technology)
Non-invasive Blood Pressure, NIBP	**Measuring method:** Oscillometric Cuff; **Pressure display range:** 0 to 300 mmHg
Invasive Blood Pressure, IBP	**Measuring range:** –50 to 300 mmHg; **Pulse rate display range from IBP range:** 0, 30 to 300 beats/min
Temperature	**Measuring range:** 0 to 45°C; **Number of channels:** 4 (max)
Cardiac Output	**Measuring method:** Thermodilution method; **Measuring range:** Injectate temperature (Ti): 0°C to 27°C; **Blood temperature (Tb):** 15°C to 45°C; **Thermodilution curve (delta Tb):** 0°C to 2.5°C; **Cardiac output (CO):** 0.5 to 20 L/min
CO_2	**CO_2 measuring range:** 0 to 150 mmHg; **Respiration rate counting range:** 3 to 150 breaths/min
BIS	**Input channels:** 2; **Measuring parameters:** Bispectral Index (BIS), 95% Spectral Edge Frequency (SEF90, SEF95), Suppression Ratio (SR), EMG, Signal Quality Index (SQI)

CONNECTIVITY

Standard: Ethernet (LS-Net), USB, third party interface (2), HDMI remote video out, recorder and RS-232 Serial out. Optional third party interface (4), Nurse call, independent interactive remote display port, DVI independent remote video out, Ethernet (HIS), ground terminal and AC power.

OPERATING ENVIRONMENT

Temperature	41 to 104°F (5 to 40°C)
Humidity	30 to 85% RH (non-condensing)
Atmospheric Pressure	700 to 1060 hPa
Degree of Protection	**Against harmful ingress of water:** IPX1

POWER REQUIREMENT

AC	100 to 240 V ±10%
DC (SB-950P)	10.8 V
Line Frequency	50 or 60 Hz
Battery Operation Time	**CSM-1502:** Up to 120 minutes
Power Input	AC 120, Battery 100 VA
Noise	<48 dBA

DIMENSIONS & WEIGHT

Dimensions	**CSM-1502:** 15.9" W × 11.9" H × 8" D (403 W × 302 H × 204 D mm) **BSM-1700:** 5.8" W × 7.6" H × 3.7" D (147 W ×194 H × 94 D mm) **WS-151P recorder unit:** (built in option) **AA-174P multi amp unit:** 6.1" × 2.4" × 7.5" (156 W × 63 H × 190 D mm) (option, excluding cable)
Weight	**CSM-1502:** 15.4 lbs (7 kg) **BSM-1700:** 3.5 lbs (1.57 kg without battery pack) **WS-151P recorder unit:** 0.77 lbs (0.35 Kg) (option) **AA-174P multi amp unit:** 1.8 lbs (0.82 kg) (option)

** With optional modules*

FOR MORE INFORMATION, PLEASE CONTACT US AT 1-800-325-0283 OR VISIT US.NIHONKOHDEN.COM.
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