

GZ-140

Ambulatory Vital Signs ECG, respiration rate, pulse oximetry, iNIBP*



Actual Size



SMART

- Runs over shared or dedicated Wi-Fi networks, or independently in local monitoring mode
- Maintains a comprehensive patient record with up to 15-minute data backfill in the event of wireless coverage loss
- Automatically switches to local monitoring mode during Wi-Fi coverage loss



SAFE

- Premium as standard philosophy; all devices are fully featured, including arrhythmia analysis and full disclosure
- Helps detect falls and wandering with a proprietary algorithm
- Enables expansion of ambulatory monitoring throughout the hospital



SECURE

- Complies with current wireless security protocols, including 802.1X and WPA2 Enterprise with AES encryption and EAP authentication
- Seamless integration with hospital enterprise system, with authorized access to data on the Nihon Kohden network
- Software upgrades and security updates included for the life of the equipment



* Inflationary non-invasive blood pressure.

Quicker and more comfortable non-invasive blood pressure measurements compared to traditional deflation method.¹



Wireless Patient
Monitoring System



Specifications

GZ-140

MEASURED PARAMETERS

Waveforms:	ECG (up to 8 vectors), respiration, SpO ₂ pulse waveform
Numeric Data:	Heart rate, respiration rate, SpO ₂ , pulse rate, NIBP

DISPLAYED DATA

Display Screen:	3.2" TFT color LCD
Waveforms:	ECG, respiration curve, SpO ₂ pulse waveform
Numeric Data:	Heart rate, VPC rate, ST level, respiration rate, SpO ₂ , pulse rate, NIBP (Systolic (SYS), diastolic (DIA), mean (MAP))
Status Information:	Battery level, alarm suspended, pause monitoring, ECG lead, pacing detection, electrode status, SpO ₂ status
Review Data:*	Full Disclosure: 1 hour, Tabular Trend: 1 hour, NIBP Trend: 100 items, Arrhythmia Recall: 720 files, Alarm History: 1000 events

*The wearable vital sign telemeter can display review data saved on the telemeter and 24 hours of data (except P1) saved on the central monitor. The alarm history saved on the central monitor is not displayed on the wearable vital sign telemeter.

ALARMS

Alarm Items:	Vital sign, arrhythmia, technical
Alarm Levels:	Crisis, warning, advisory
Alarm Pause/Silence:	1, 2, 3 min, selectable

ECG MEASUREMENT

Leads:	I, II, III, AVR, AVL, AVF, 2 from V1-V6
Input Range:	≥ ±5 mV
DC Offset Tolerance:	≥ ±500 mV
Input Impedance:	≥ 5 MΩ (at 10 Hz), ≥ 2.5 MΩ (at 0.67 to 40 Hz)
QRS Detection:	Amplitude ≥ 0.5 mV
HR Counting Range:	0, 15 to 300 beats/min
HR Counting Accuracy:	± 2 beats/min

RESPIRATION MEASUREMENT

Measuring Method:	Impedance method
Measuring Lead:	R-F
Impedance Range:	220 to 2,000Ω
Counting Range:	0 to 150 breaths/min
Measuring Accuracy:	± 2 beats/min

SPO₂ MEASUREMENT

Display Range:	0 to 100%
Declared Range:	70 to 100%
Accuracy:	± 3% SpO ₂ (70% SpO ₂ ≤ SpO ₂ < 80% SpO ₂) ± 2% SpO ₂ (80% SpO ₂ ≤ SpO ₂ ≤ 100% SpO ₂) Less than 70% is not specified

PULSE RATE MEASUREMENT

Measuring Range:	30 to 300 beats/min
Accuracy:	±3% ± 1 beat/min

NIBP MEASUREMENT

Measuring Method:	Oscillometric
Measuring Modes:	Manual, STAT, periodic
Intended Patient Type:	Adult, Child
Measuring Range:	0 to 300 mmHg
Measuring Accuracy:	±3 mmHg
Maximum Pressure:	300 mmHg
Cuff Time Limiter:	≤ 160 s
Displayed Items:	Systolic, diastolic, mean

TRANSMITTER

FCC Regulation:	FCC requirement 15.407(c)
Wireless Communication:*	IEEE 802.11 a/b/g/n, OKC *Requires wireless gateway
Water Resistance:	IPX1

DIMENSIONS AND WEIGHT

Dimension:	5.4" W x 3.9" H x 1.7" D (excluding protruding parts)
Weight:	13.2 oz (excluding batteries)

POWER REQUIREMENTS

Battery Type:	Three AA (R6) alkaline or NiMH batteries
Operating Time:*	Monitor Mode OFF: 24 hours for Alkaline and NiMH, Monitor Mode ON: 3 hours for Alkaline and 7 hours for NiMH

*Operation time may vary depending on radio wave conditions, and is subject to change. Please see the operator's manual for a complete listing of the measurement conditions for the above specification.

OPERATING ENVIRONMENT

Temperature:	+5 to +40°C (+41 to +104°F)
Humidity:	15 to 85% RH
Atmospheric Pressure:	70 to 106 kPa

For more information, please contact us at 1-800-325-0283 or visit us.nihonkohden.com

¹Onodera J, Kotake Y et al. Validation of inflationary non-invasive blood pressure monitoring in adult surgical patients. J Anesth. 2011; 25: 127-30.



Wireless Patient Monitoring System

NK-HiQ™ is a trademark of Nihon Kohden Corporation.



MMLB 175 (B)-CO-1698