

GZ-140 AMBULATORY VITAL SIGNS

ECG, RESPIRATION RATE, PULSE OXIMETRY, iNIBP*

SMART

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

SAFE

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

SECURE

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



Actual Size



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

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

GZ-140

SPECIFICATIONS

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 PI) 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

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MKT-01126 [A]

CAUTION: Federal (United States) Law restricts this device to sale by or on the order of a physician. See Operators Manual for full prescribing information, including indications for use, contraindications, warnings, precautions and adverse events.