



NTX

## Multi-Parameter Ambulatory Transmitter

### ZM-940PA Multi-Lead ECG • ZS-940PA Single-Lead

- World's 1st ergonomically designed transmitter capable of monitoring ECG, SpO<sub>2</sub>, Respiration and NIBP
- All data can be accessed from anywhere on the network and integrated into your electronic charting system
- Scalable to accommodate the ambulatory requirements for any patient regardless of their location
- Bridges the gap between a traditional bedside monitor and an ambulatory transmitter
- Includes our unprecedented 5-year parts and labor warranty

**Nihon Kohden America**  
Smarter is better.

# Specifications

## ZM-940PA - ZS-940PA Multi-Parameter Ambulatory Transmitters

### Parameters

ECG (ZM-940PA 8 vectors, ZS-940PA 1 vector), Respiration (impedance method) SpO<sub>2</sub>, NIBP

### Transmitted Data

Waveform data: ECG, respiration, pulse wave  
 Numeric data: SpO<sub>2</sub> and NIBP  
 Status Information: Low battery, channel ID, type of transmitter, check electrodes, abnormal polarization voltage, pacing data, SpO<sub>2</sub> status

### Data Displayed on Transmitter

SpO<sub>2</sub>, NIBP, pulse rate, pulse wave bar graph, check electrode, low battery, NIBP measurement mode and status information

### ECG Measurement

Leads: ZM-940PA 8-Leads, ZS-940PA 1-Lead  
 Input range: ±5 mV or more  
 DC offset: ±500 mV or more  
 Input impedance: 5MΩ or more (5 Hz)  
 Pacing pulse detection: ANSI/AAMI EC13 (Based upon pacemaker pulse rejection capability)

### Respiration Measurement

Measuring method: Impedance method  
 Impedance range: 0 to 2 kΩ or less

### SpO<sub>2</sub> Measurement

Display range: Depends on the receiving monitor  
 Measuring range: 0 to 100%, in 1% steps  
 Measuring accuracy:  
 When the measuring accuracy of the SpO<sub>2</sub> probe is not considered:  
 ±1 (80% ≤ SpO<sub>2</sub> ≤ 100%)  
 ±2 (50% ≤ SpO<sub>2</sub> < 80%)  
 Less than 50% is not specified.  
 When the measuring accuracy of the SpO<sub>2</sub> probe is considered:  
 ±2 (80% ≤ SpO<sub>2</sub> ≤ 100%)  
 ±3 (70% ≤ SpO<sub>2</sub> < 80%)  
 Less than 70% is not specified.

### NIBP Measurement

Displayed items: Systolic, Diastolic, Mean  
 Cuff pressure display range: 0 to 300 mmHg  
 Measurement modes: Manual, STAT, Auto at 5, 10, 15, 30, 60, 120 or 240 minute intervals

### Pulse Rate

Measuring range: 30 to 200 beats/min ±3% ±1 beat/min (SpO<sub>2</sub>)

### Transmitter

FCC regulation: Wireless Medical Telemetry Service (WMTS), FCC part 95 Subpart H

### Transmission

frequency range: 608.0250 to 613.9750 MHz

### Power Requirements

Operating voltage: 3.2 to 4.8 V

Battery type: Three AA type alkaline dry cell primary batteries or three AA type NiMH secondary batteries

### Battery life:

Type	Battery Life (Measuring parameters)		
	ECG, SpO <sub>2</sub> , NIBP	ECG, SpO <sub>2</sub>	ECG only
Alkaline primary	1 day	2.5 days	3 days
NiMH secondary	2 days	2.5 days	3 days

The above data is when new batteries are used at room temperature, NIBP is measured at 60-minute intervals with continuous SpO<sub>2</sub>

### Dimension and Weight

Dimension: 4.5 W x 4.0 H x 2.3 D (inches)  
 Weight: about 9.9 oz

### Environment

Operating environment  
 Operating temperature: 10 to 40°C, 50 to 104°F  
 Operating humidity: 30 to 85% (non-condensing)  
 Operating atmospheric pressure: 70 to 106 kPa  
 Storage environment  
 Storage temperature: -20 to 65°C, -4 to 149°F  
 Storage humidity: 10 to 95%  
 Storage atmospheric pressure: 70 to 106 kPa

This brochure may be revised or replaced by Nihon Kohden at any time without notice.



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