

EDNS-9001 Prefense®

Early Detection & Notification System



Safeguard your medical/surgical patients with continuous surveillance of heart rate, SpO₂, EtCO₂, respiration rate and non-invasive blood pressure.

With Prefense Early Detection and Notification System™, Nihon Kohden makes it possible - and affordable - to continuously monitor your at-risk patients, not just those in conventionally monitored areas such as critical care or telemetry. This innovative Defensive Monitoring™ system enables medical personnel to monitor and track trends on vital statistics on a continuous basis via a wireless transmitter providing advance warning of patient deterioration that is simply unattainable using traditional spot-check technology.

- Early Detection and Notification System results in faster intervention of care for patients with acute vital sign changes
- Provides continuous surveillance for at risk patients, such as those on opioid drips or with sleep apnea
- Higher patient safety and better outcomes
- Improved economics with better bed utilization and reduced stays
- Fewer unplanned transfers to Critical Care and Telemetry
- FDA cleared smoothing algorithm that reduces nuisance alarms by greater than 75%
- Automated data integration to your electronic charting system using the CGS-9002 HL7 Gateway System

Specifications

EDNS-9001 Prefense

ORG-9100A Multi-patient Receiver

EDNS-9001 Prefense

DISPLAY

Number of Patients Displayed:	40, 32, 24 or 16 selectable
Display Type:	24 inch Widescreen Color LCD
Screen Resolution:	1920 x 1200

ALL BED DISPLAY SCREEN

Parameters Displayed:	Heart rate/PR, EtCO ₂ , SpO ₂ , Respiration Rate (CO ₂ or Impedance), Non-invasive Blood Pressure (Systolic, Diastolic, and Mean)
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SPLIT DISPLAY SCREEN (USED FOR DATA REVIEW AND ENTRY)

Number of Waveform Traces:	Three on Event Review screen; ECG, CO ₂ or Impedance Respiration, and Pulse Waveform from SpO ₂
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Waveform Display Method:	Non-fade, fixed method
Sweep Speed:	25 mm/s

SOUND

Alarm Sounds:	Crisis, Warning, Advisory, and Technical Alarms
Sound Volume:	Changeable for Alarm Sound, Selectable minimum volume can be programmed in System Setup

ALARM FUNCTION

Alarm Type:	Crisis, Warning, Advisory, and Technical Alarms
Alarm Items:	Vital Signs: Heart rate, EtCO ₂ , Respiration Rate, Apnea, Pulse Rate, NIBP (systolic, diastolic, mean), and SpO ₂ and Arrhythmia

Arrhythmia:	Crisis Arrhythmias only, ASYSTOLE, V FIB, V TACHY
Alarm Display:	Highlighted numeric display and message
Alarm Silence:	Available

EVENT RECALL

Type of Events Stored:	All detected alarm events
Number of Stored Events per Patient:	1,000 events for 72 hours
Information Stored with Each Event:	Type of event, All vital signs at time of event, Full Disclosure for 9 minutes

GRAPHICAL TREND

Trend Parameters:	All monitored parameters
Trend Display Times:	1, 8, 12, 24, 48, and 72 hour

VITAL SIGNS LIST

List Parameters:	All monitored parameters
List Display Times:	1, 5, 10, 15, 30 and 60 minute intervals with data stored for 72 hours

LASER PRINTER (OPTION)

Manual Printing:	Multi-Wave printing, Trendgraph printing, Tubular Trend printing, Event Recall printing with Full Disclosure Waveform, Report printing
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POWER REQUIREMENTS

Prefense Main Unit:	
Line Voltage:	AC 100 to 240 V ± 10%
Line Frequency:	50 or 60 Hz
Power Consumption:	AC 90 VA

LCD Unit:

Line Voltage:	AC 100 to 240 V
Line Frequency:	50 or 60 Hz
Power Consumption:	AC 90 VA

ENVIRONMENT

Operating Temperature:	0° to 50°C
Storage Temperature:	-30° to 65°C
Relative Humidity:	95% non-condensing

DIMENSIONS AND WEIGHT

Prefense Main Unit:

Dimensions:	6.5" x 6.3" x 1.9"
Weight:	2.4 lbs

LCD Unit:

Dimensions:	25.4" x 20.1" x 9.6"
Weight:	21.6 lbs

ORG-9100A Multi-patient Receiver

RECEIVER

Number of Patients:	Up to 8
Receiving Method:	Double super heterodyne
Reception Frequency:	WMTS Band, Synthesizer method 608 to 614, 1395 to 1400, and 1429 to 1432 MHz
Receiver Channel:	Selectable by user on Prefense
Antenna:	Dual diversity antenna system

PARAMETERS

ECG:	I, II, III, or MCL (single vector)
Heart Rate Counting Range:	0, 10 to 300 beats/min
Arrhythmia:	VPC detection method: Multi-template matching
Respiration Counting Range:	0 to 150 breaths/min
SpO₂ Measuring Range:	0 to 100%
Pulse Counting Range:	0, 30 to 300 beats/min
Non-invasive Blood Pressure Measuring Range:	0 to 300 mmHg

POWER REQUIREMENTS

Line Voltage:	117 V ±10% AC, 60 Hz
Rated Current:	less than 0.2 A

ENVIRONMENT

Operating Temperature:	10° to 40°C (50° to 104°F)
Storage Temperature:	-20° to 65°C (-4° to 140°F)
Operating Humidity:	30 to 85% RH, non-condensing
Storage Humidity:	10 to 95% RH, non-condensing
Operating Atmospheric Pressure:	70 to 106 kPa
Storage Atmospheric Pressure:	70 to 106 kPa

DIMENSIONS AND WEIGHT

Dimensions:	2.9" x 9.8" x 8.9"
Weight:	8.0 lbs (including 8 receivers)

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