



AUG 01 2002

K022193

GE Medical Systems  
Information Technologies

General Electric Company  
4502 Woodland Corporate Blvd., Tampa, FL 33614  
813 887-2000

## SUMMARY OF SAFETY AND EFFECTIVENESS

July 3, 2002

### DINAMAP® ProCare Series 100N-400N Monitor

#### A. Submitter

GE Medical Systems Information Technologies  
4502 Woodland Corporate Boulevard  
Tampa, FL 33614

#### B. Company Contact

**Primary:**  
Melissa Robinson  
Regulatory Affairs Specialist  
Phone: 813-887-2133  
Fax: 813-887-2552

**Secondary:**  
Tom English  
Global QA/RA  
Phone: 813-887-2107  
Fax: 813-887-2413

#### C. Common Name

Physiological or Vital Signs Monitor, Patient Monitor

Classification Name	Product Code	21 CFR
System, Measurement, Blood Pressure, Noninvasive	DXN	870.1130
Computer, Blood Pressure	DSK	870.1110
Alarm, Blood Pressure	DSJ	870.1100
Oximeter	DQA	870.2700
Oximeter, Ear	DPZ	870.2710
Thermometer, Clinical Electronic	FLL	880.2910
Recorder, Paper Chart	DSF	870.2810

#### D. Predicate/Legally Marketed Devices

DINAMAP® ProCare Series Monitor –K014255  
GE Medical Systems Information Technologies

## **E. Device Description**

The DINAMAP ProCare Series 100N-400N Monitor is a prescription device intended for use only by health care professionals. Four configurations of the monitor—all with integrated printer—will offer the following vital signs parameters:

- DPC 100N: Non-Invasive Blood Pressure and Pulse Rate
- DPC 200N: Non-Invasive Blood Pressure and Pulse Rate, Temperature
- DPC 300N: Non-invasive Blood Pressure and Pulse Rate, Pulse Oximetry
- DPC 400N: Non-Invasive Blood Pressure and Pulse Rate, Pulse Oximetry and Temperature.

This portable device includes an integrated printer and is capable of operation from an external AC mains power source or an internal lead-acid rechargeable battery.

## **F. Intended Use**

The DINAMAP® ProCare Series 100N-400N Monitor is intended to monitor a single adult, pediatric or neonatal patient's vital signs at the bedside or during intra-hospital transport. Vital signs parameters include non-invasive blood pressure (systolic, diastolic, and mean arterial pressure), pulse rate, and/or oxygen saturation (pulse oximetry) and/or temperature. The portable device is designed for use in numerous clinical settings in various hospital departments such as emergency, radiology, recovery, medical/ surgical, labor and delivery, endoscopy, cardiac step-down. It can also be used in satellite areas, physicians' offices, or alternate care settings.

## **G. Technological Characteristics**

The DINAMAP® ProCare Series 100N-400N Monitor has the same technological characteristics as the predicate device, the DINAMAP® ProCare Series Monitor. There are no new technologies used on the DINAMAP® ProCare Series 100N-400N Monitor.

## **H. Parameter Technology**

The DINAMAP® ProCare Series 100N-400N Monitor has the following parameter technologies:

- NIBP algorithm as implemented on the ProCare Series Monitor
- Alaris IVAC Turbo thermometry technology as implemented on the ProCare Series Monitor
- Wholly implemented Nellcor N-595 SpO2 technology

## **I. Testing**

Several bench studies were conducted which demonstrate safety and effectiveness of the DINAMAP® ProCare Series 100N-400N Monitor:

- Electromagnetic Compatibility
- Electrical Safety
- Mechanical and Environmental

**K. Substantial Equivalence**

ProCare Series 100N-400N	Predicate Device & Model	510(k) Numbers
Monitor	DINAMAP ProCare Series	K014255
Pulse Oximetry	Nellcor N-595 Pulse Oximeter	K012891
Temperature	Alaris Medical System	K955846
NIBP	DINAMAP ProCare Series	K014255



AUG 01 2002

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Ms. Melissa Robinson  
Regulatory Affairs Specialist  
GE Medical Systems Information Technologies  
4502 Woodland Corporation Boulevard  
Tampa, Florida 33614

Re: K022193

Trade/Device Name: DINAMAP® ProCare Series 100-400N Monitor  
Regulation Number: 870.2700 and 870.2300  
Regulation Name: Oximeter  
Regulatory Class: II  
Product Code: DQA and MWI  
Dated: July 3, 2002  
Received: July 5, 2002

Dear Ms. Robinson:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

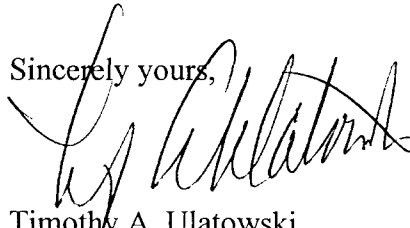
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies.

You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4646. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,  
  
Timothy A. Ulatowski  
Director

Division of Anesthesiology, General Hospital,  
Infection Control and Dental Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**INDICATIONS FOR USE**

510(k) Number (if known): K022193

Device Name: DINAMAP® ProCare Series 100N-400N Monitor

Indications for Use:

The DINAMAP® ProCare Series 100N-400N Monitor is intended to monitor a single adult, pediatric or neonatal patient's vital signs at the bedside or during intra-hospital transport. Vital signs parameters include non-invasive blood pressure (systolic, diastolic, and mean arterial pressure), pulse rate and/or temperature and/or oxygen saturation (pulse oximetry). The portable device is designed for use in numerous clinical settings in various hospital departments such as emergency, radiology, recovery, medical/surgical, labor and delivery, endoscopy, cardiac step-down. It can also be used in satellite areas, physicians' offices, or alternate care settings.

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

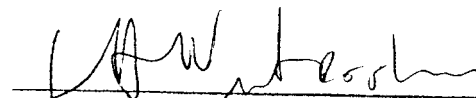
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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use    
 (per 21 CFR 801.109)

OR

Over-The Counter Use    
 (Optional Format 1-2-96)

  
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(Division Sign-Off)  
Division of Dental, Infection Control,  
and General Hospital Devices  
510(k) Number K022193