

APR 29 2005

**510(k) SUMMARY**  
as required per 807.92(c)

Submitter's Name and Address: Draeger Medical Systems, Inc.  
16 Electronics Avenue  
Danvers, MA 01923

Contact Person: Penelope H. Greco  
Regulatory Affairs Manager  
(978) 907-7503  
(978) 750-6879

Date submission was prepared: April 12, 2005

Device Name:  
Common Name: Amplifier and Signal Conditioner,  
Transducer Signal

Classification Name: DRQ  
Regulation Number: 21 CFR 870.2060  
Class: 2

Legally Marketed Device Identification: Infinity Medical Information Bus  
Protocol Converter

**Device Description:**

Draeger's Infinity Medical Information Bus Protocol Converters have received numerous 510(k) clearances for connectivity to third party devices. The release of MIB VF5.1 software enables connectivity of the Viasys Bear 1000 ventilator to the Infinity modular monitors.

This connection enables the display of device specific data on an Infinity modular monitor. Data from the Viasys Bear 1000 ventilator can also be displayed and alarms annunciated on the VentCentral application (K003246) of the MultiView.

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**Intended Use:**

The Draeger Medical Information Bus Protocol Converters are intended for use in an environment where patient care is provided by healthcare professionals (Physician, Nurse, Technician) when the professional determines that a third party medical device should be connected to an Infinity Modular Monitor for display of data.

Connectable devices include: Maquet SV 900, SV 300, Servoi ventilators, Baxter Vigilance blood gas/continuous cardiac output monitor, Draeger Evita II, VI, Evi-taXL, Babylog, & Savina ventilators, Puritan Bennett 7200 & 840 ventilators, Hamilton Galileo ventilator, Draeger Narkomed 6000 & 6400 / Narkomed II & VI Anesthesia Systems, Draeger Julian Anesthesia machine, Ohmeda 7900 Anesthesia Machine, Abbott Oximetric 3 Blood Gas Analyzer, AVL Medical Instruments: Opti Critical Care Analyzer Portable Blood Gas Analyzer, Optical Sensors Inc.: OSI-Optical CAM, VIA Medical: VIA V-ABG1 Blood Gas Chemistry Monitor, and Aspect A-2000 BIS, Abbott Q2, Sensormedics Micro Gas 7650, Draeger Fabius Tiro, Draeger Primus, and Viasys Bear 1000 ventilator.

Substantial Equivalence:

Assessment of non-clinical performance data for equivalence:

Verification and validation testing performed indicates that the modifications implemented with software version VF5.1 are as safe and effective as previous versions and have not altered the fundamental technology of the device(s).

Assessment of clinical performance data for equivalence: Not applicable

Biocompatibility:

Not applicable

Sterilization:

Not applicable

Standards and Guidance:

1073.3.1 Medical Device Communications-  
Transport Profile-Connection Mode  
1073.3.2 – 2000 IEEE Standard for Medical Communications  
Transport Profile – IrDA Based – Cable Connected

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APR 29 2005

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Draeger Medical Systems, Inc.  
c/o Ms. Penelope H. Greco  
Regulatory Affairs Manager  
16 Electronics Avenue  
Danvers, MA 01923

Re: K050974

Trade Name: Infinity Medical Information Bus Protocol Converter  
Regulation Number: 21 CFR 870.2060  
Regulation Name: Transducer Signal Amplifier and Signal Conditioner  
Regulatory Class: II (two)  
Product Code: DRQ  
Dated: April 12, 2005  
Received: April 18, 2005

Dear Ms. Greco:

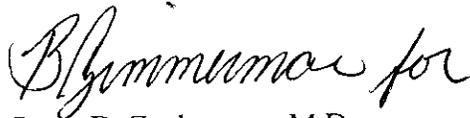
We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 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), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97) you may obtain. 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,



Bram D. Zuckerman, M.D.  
Director  
Division of Cardiovascular Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): \_\_\_\_\_

Device Name: Infinity Medical Information Bus Protocol Converter

Indications for use

The Infinity Medical Information Bus (MIB) Protocol Converters (MIB, II & MIB Duo) are indicated for use in an environment where patient care is provided by healthcare professionals (Physician, Nurse, Technician) when the professional determines that third party medical devices that provide data should be connected to a Draeger Infinity Modular Monitor for display. Such devices include:

- Maquet SV 300 ventilator
- Maquet Servo Ventilator
- Maquet SV900 ventilator
- Draeger Evita 2 ventilator
- Draeger Evita 4 ventilator
- Draeger EvitaXL ventilator
- Draeger Savina ventilator
- Draeger Babylog ventilator
- Draeger FabiusGS Anesthesia System
- Draeger Narkomed 2 Anesthesia System
- Draeger Narkomed 4 Anesthesia System
- Draeger Narkomed 6000 / 6400 Anesthesia Systems
- Draeger Julian Anesthesia Machine
- Puritan Bennett 7200 ventilator
- Puritan Bennett 840 ventilator
- Hamilton Galileo ventilator
- Ohmeda 7900 Anesthesia Machine
- Abbott Oximetrix 3 Blood Gas Analyzer
- Abbott Q2 CCO monitor
- AVL Medical Instruments: Opti Critical Care Analyzer, Portable Blood Gas Analyzer
- Baxter Vigilance blood gas/continuous cardiac output monitor
- Optical Sensors Inc.: OSI – Optical CAM
- VIA Medical: VIA V-ABG1 Blood Gas Chemistry Monitor
- Aspect A-2000 BIS Monitor\*
- Sensormedics Micro Gas 7650
- Draeger Fabius Tiro
- Draeger Primus
- Viasys Bear 1000

Note: \*The SC 9000 does not support communication with the Aspect BIS Monitor

**MRI Compatibility Statement:**

The MIB, MIB II and MIB DUO Protocol Converters are not compatible for use in a MRI magnetic field.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

PLEASE PRINT OR WRITE BELOW THIS LINE IF CONTINUED ON ANOTHER PAGE OF NEEDS

\_\_\_\_\_  
Signature of CDRM, Office of Device Evaluation (ODD)

*Blumman*  
Sign-Off

Office of Cardiovascular Devices

510(k) Number K050974