

**510(k) Summary** K121914

SEP 7 2012

Submitter: Masimo Corporation  
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Contact: David Collette  
Sr. Manager, Regulatory Affairs

Date Summary Prepared: September 6, 2012

Trade Name: Masimo SET<sup>®</sup> uSpO<sub>2</sub><sup>™</sup> Pulse Oximetry Cable

Regulation Name: Pulse Oximeter

Classification Regulation: 21 CFR 870.2700  
Class II

Product Code: DQA

Existing Device: K040259 - Masimo SET<sup>®</sup> IntelliVue Pulse Oximeter Module

**Device Description**

The Masimo SET<sup>®</sup> uSpO<sub>2</sub><sup>™</sup> Pulse Oximetry Cable is an in-line cable that provides continuous noninvasive monitoring of functional oxygen saturation of arterial hemoglobin (SpO<sub>2</sub>) and pulse rate when installed in a compatible OEM host system.

In this submission, the uSpO<sub>2</sub> Pulse Oximetry Cable incorporates a distal integrated LNCS-compatible 9-pin sensor connector with a length of cable used to interface to the host device, the GE ApexPro Telemetry System (K080251). The proximal end of the cable incorporates a connector that is compatible with the host device.

**Indications for Use**

The Masimo SET uSpO<sub>2</sub> Pulse Oximetry Cable is indicated for the continuous noninvasive monitoring of functional oxygen saturation of arterial hemoglobin (SpO<sub>2</sub>) and pulse rate (measured by an SpO<sub>2</sub> sensor). The Masimo SET uSpO<sub>2</sub> Pulse Oximetry Cable is indicated for use with adult, pediatric and neonatal patients during both motion and no motion conditions, and for patients who are well or poorly perfused in hospitals and hospital-type facilities.

## Predicate Device Comparison

Characteristic	Masimo SET® IntelliVue Pulse Oximeter Module K040259	Masimo SET® uSpO <sub>2</sub> ™ Pulse Oximetry Cable K121912
Host system	Philips IntelliVue	GE ApexPro Telemetry System
Physical configuration	Plug-in module Direct connect to host system.	Plug-in module with in-line cable to connect to host system.
Pulse oximetry technology	Masimo SET Technology	Masimo SET Technology
Communication protocol	IntelliVue host-system specific	GE ApexPro host-system specific
Compatible sensors and cables	Masimo LNOP and LNCS oximetry sensors Masimo LNC patient cables	Masimo LNCS oximetry sensors Masimo LNOP oximetry sensors (with adapter) (patient cables not required)

## Summary of Testing

The following testing of the uSpO<sub>2</sub> Pulse Oximetry Cable was performed in accordance with the requirements of the design control regulations and established quality assurance processes to demonstrate substantial equivalence of the modified device to the cleared device:

- Design Review Process
- Risk Analysis per ISO 14971
- Software Verification and Validation per FDA Guidance Documents
- Electromagnetic Compatibility per IEC 60601-1-2
- Electrical Safety Testing per IEC 60601-1
- Environmental Testing (Operating Temperature, Humidity, Fluid Ingress)
- Component and System Testing
- System Compatibility Testing (GE ApexPro Telemetry System)

## Conclusion

The information in this 510(k) submission demonstrates that the subject Masimo SET uSpO<sub>2</sub> Pulse Oximetry Cable is substantially equivalent to the existing device with respect to safety, effectiveness, and performance.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room -WO66-G609  
Silver Spring, MD 20993-0002

Masimo Corporation  
Mr. David Collette  
Senior Manager, Regulatory Affairs  
40 Parker  
Irvine, California 92618

SEP 7 2012

Re: K121914

Trade/Device Name: Masimo Set® uSpO<sub>2</sub><sup>TM</sup> Pulse Oximetry Cable  
Regulation Number: 21 CFR 870.2700  
Regulation Name: Oximeter  
Regulatory Class: II  
Product Code: DQA  
Dated: August 8, 2012  
Received: August 9, 2012

Dear Mr. Collette:

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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to 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.

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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); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); 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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to

<http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

For 

Anthony D. Watson, B.S., M.S., M.B.A.

Director

Division of Anesthesiology, General Hospital,

Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

**Section 4. Indications for Use**

**Indications for Use**

510(k) Number: K121914

Device Name: Masimo SET<sup>®</sup> uSpO<sub>2</sub><sup>™</sup> Pulse Oximetry Cable

**Indications for Use:**

The Masimo SET<sup>®</sup> uSpO<sub>2</sub><sup>™</sup> Pulse Oximetry Cable is indicated for the continuous noninvasive monitoring of functional oxygen saturation of arterial hemoglobin (SpO<sub>2</sub>) and pulse rate (measured by an SpO<sub>2</sub> sensor). The Masimo SET<sup>®</sup> uSpO<sub>2</sub><sup>™</sup> Pulse Oximetry Cable is indicated for use with adult, pediatric and neonatal patients during both motion and no motion conditions, and for patients who are well or poorly perfused in hospitals and hospital-type facilities.

Prescription Use.   X    
(Part 21 CFR 801 Subpart D)

AND/OR Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(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)

  
\_\_\_\_\_  
(Division Sign-Off)  
Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

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