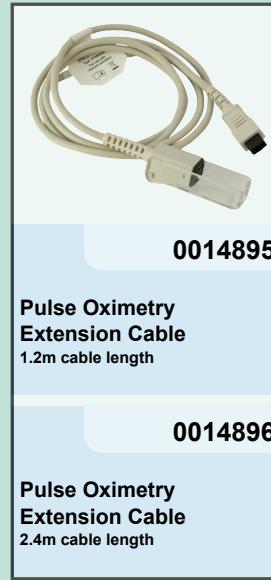
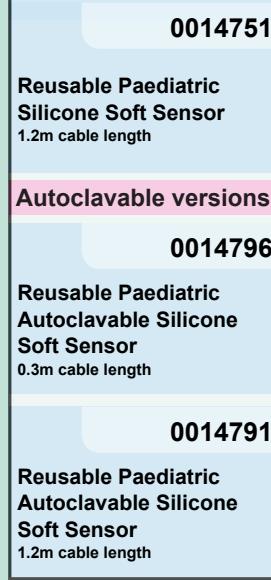
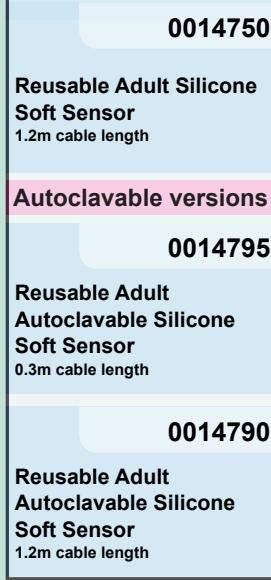
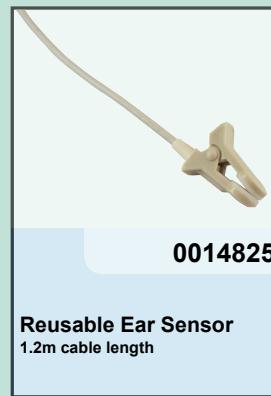


Sensors and Cables



** Contact Viamed regarding availability

Technical Specifications

Measuring Range

SpO ₂	0 - 100%
Pulse Rate	20 - 300 bpm

Accuracy

SpO ₂ (70 - 100%)	1<3.0% Accuracy A _{RMS} *, ± 1 S.D = 2.0%
Pulse Rate	± 1 digit (≤100bpm) ± 1% (>100 bpm)

Optical Specifications

Red emitter	660nm, typ 3.5mW
Infra-red emitter	905nm, typ 3.5mW

Display

Features	Colour OLED, 26,000 colours, 128 x 160 pixels
Date displayed	Oxygen saturation, pulse rate, plethysmogram, bar graph, short and long term trends
Indicators	Signal quality, pulse amplitude, battery status, alarm silenced, sensor detection, sensor disconnection

Trend Information

Short term trend	15 / 30 / 240 minutes
Long term trend	> 480 hours

Environmental Conditions

Operating temperature	-20 - 50°C , 15 - 95% RH, 600 - 1300 hPa
Storage temperature	-30 - 70°C, 10 - 95% RH, 600 - 1500 hPa

Regulatory Approvals

Standards	CE Class IIb in accordance with MDD 93/42/EEC BS EN 60601-1:2006, BS EN 60601-1-1:2001 BS EN 60601-1-2:2007, BS EN ISO 9919:2005
Safety	Class II, Type BF

Assembly

Construction	IPX2 with silicone cover, splash-proof version of IPX4 available on request.
Dimensions	118 mm (L) x 60 mm (W) x 25 mm (H)
Weight	Approx. 160 g (including batteries, without sensor)
Power Supply	3 x AA alkaline batteries.
Battery Life	> 2 days continuous operation or approx 5 days in economy power mode
PC interface	USB 2.0

Part Numbers

VM-2160-L*	0012155
EAN-13 (GTIN-13) Barcode: 5051826002582	
NHS Stock Code: FBC205	
* Language package: Central European, including:	
English, Afrikaans, Dutch, French, German, Hungarian, Italian, Polish, Portuguese and Spanish.	
VM-2160-L - Scandinavian languages (English, Danish, Finnish, Swedish)	0012156
VM-2160-L - Special EU characters languages (English, Greek, Russian, Turkish)	0012157
VM-2160-L - Asia I languages (English, Chinese and Traditional Chinese)	0012158
VM-2160-L - Asia II languages (English, Japanese and Korean)	0012159
VM-2160*	
EAN-13 (GTIN-13) Barcode: 5051826000007	0012160
NATO Stock Number: 6515-99-915-8170	
NHS Stock Code: FBC204	
* Language package: Central European, includes: English, Afrikaans, Dutch, French, German, Hungarian, Italian, Polish, Portuguese and Spanish.	
VM-2160 - Scandinavian languages (English, Danish, Finnish, Swedish)	0012161
VM-2160 - Special EU characters languages (English, Greek, Russian, Turkish)	0012162
VM-2160 - Asia I languages (English, Chinese and Traditional Chinese)	0012163
VM-2160 - Asia II languages (English, Japanese and Korean)	0012164

Mounting Options and Accessories

 0021013 Posey Wrap Pack of 12	 0021018 Posey Wrap Paediatric Pack of 12	 0022160 Silicone Protective Cover	 0022170 Carrying Bag	 0022171 Universal Mounting Plate
 0121200 Universal Mounting Clamp	 0121183 'V' Mount Pole Clamp Horizontal	 0121184 'V' Mount Rail Clamp Small: 14 - 25mm span	 0121182 'V' Mount Pole Clamp Large: 16 - 40mm span	 0121202 'V' Wall Mount

* in accordance with ISO 9919:2005 Standards.

€ 0086

NB The Universal Mounting Kit is required when using any of the above mounting options.
Specifications subject to change.

Distributed by:



VIAMED

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Email: info@viamed.co.uk Website: www.viamed.co.uk



BS EN ISO 9001:2008
ISO 13485:2003



Part Number: ???????
Date: 01/13

FS 28344 MD 78787

pulse oximetry



VM-2160

Hand Held Pulse Oximeter

Designed with the most difficult conditions in mind

- For spot checking or constant monitoring of SpO₂ and pulse rate
- Clear and bright, colour OLED display
- Robust, ergonomic design with durable silicone protective cover
- Includes a 3rd generation soft silicone sensor*
- Stores and restores up to 480 hours of trend data
- Adjustable high and low alarms
- Antibacterial keypad



The ergonomic VM-2160 hand held pulse oximeter has the durability of a compact and lightweight hand held unit for spot checking of SpO₂, but also has the power and functionality of a stand alone pulse oximeter.

The VM-2160 incorporates adjustable high and low alarms for both the SpO₂ and pulse rate with audible pulse tones, and is able to store and restore up to 480 hours of patient trend data, enabling the unit to also be used at the bedside for continual patient monitoring.

Utilising the latest Organic LED display technology, the clear and bright colour screen offers superb visibility in all lighting conditions, including direct sunlight.

The VM-2160 can be used in a variety of applications, from use in hospitals, paramedic ambulances, clinics and dental surgeries - making this an extremely flexible and durable piece of equipment.

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The VM-2160-L offers a robust, ergonomic design unit for spot monitoring of SpO₂ and Pulse rate

- For spot checking of SpO₂ and Pulse Rate
- Clear and bright, colour OLED display
- Robust, ergonomic design with durable silicone protective cover

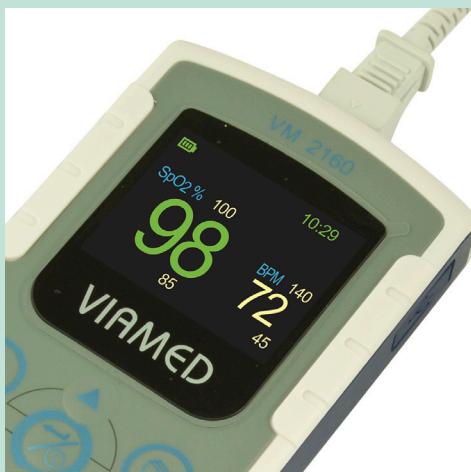
VM-2160-L Light Version

- VM-2160-L
- Reusable adult finger sensor*
- Silicone protective cover
- 3 x AA batteries

N.B. Please select from Soft Sensor (Adult or Paediatric), Finger Sensor, Silicone Wrap Sensor, Ear Sensor and indicate at the time of ordering. Autoclavable sensors are available.



For spot checking applications



VM-2160 OLED Display

Key features of the VM-2160-L Hand Held Pulse Oximeter

The VM-2160-L from the proven and well established VM-2160 device family is a reliable and accurate spot check oximeter for continuous short term monitoring and spotcheck analysis.

The VM-2160-L is well suited for all standard applications where alarms or data storage are not required or necessary. The application area regarding patient groups ranges from adults to neonates.



VM-2160 in Protective Cover



Standard Finger Sensor for the VM-2160-L

The VM-2160 offers a efficient and cost effective solution for spot monitoring or constant monitoring of SpO₂ and Pulse rate

- For spot checking or constant monitoring of SpO₂ and Pulse Rate
- Includes a 3rd generation soft silicone sensor - *other sensors can be specified
- Stores and restores up to 480 hours of trend data
- Adjustable high and low alarms

VM-2160 Standard Package

- VM-2160
- Reusable adult silicone finger sensor*
- Silicone protective cover
- PC review software
- USB data cable
- 3 x AA batteries

N.B. Please select from Soft Sensor (Adult or Paediatric), Finger Sensor, Silicone Wrap Sensor, Ear Sensor and indicate at the time of ordering. Autoclavable sensors are available.



Key features of the VM-2160 Hand Held Pulse Oximeter

- Self-explanatory and ergonomic functions enable intuitive operation
- The colour information display, as well as the simple information structure, support quick decisions and a rapid user reaction in critical situations
- Intelligent linking of visual and acoustic information and signals
- The pulse tone rate provides information about the level of oxygen saturation
- Automatic suppression of ambient light influences
- Signal quality indications
- Simple handling and clear error messages effectively prevent incorrect operation of the VM-2160
- 20 language available for operational control
- The most modern technologies and energy-saving elements enable continued use of the device over several days
- Rapid data transfer using a standard USB interface
- Silicone protective cover included in the package
- Energy supply from standard AA alkaline batteries



Silicone Soft Sensor for VM-2160. Other types available on request.

Other Available Sensors



A

Adult Soft Sensor



A

Paediatric Soft Sensor



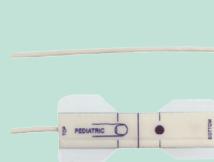
A

Finger Sensor



A

Silicone Wrap Sensor



A

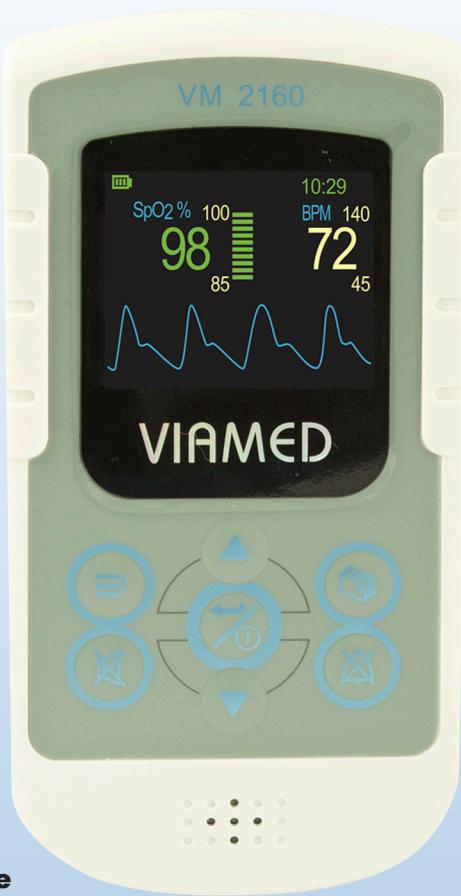
Disposable Sensors



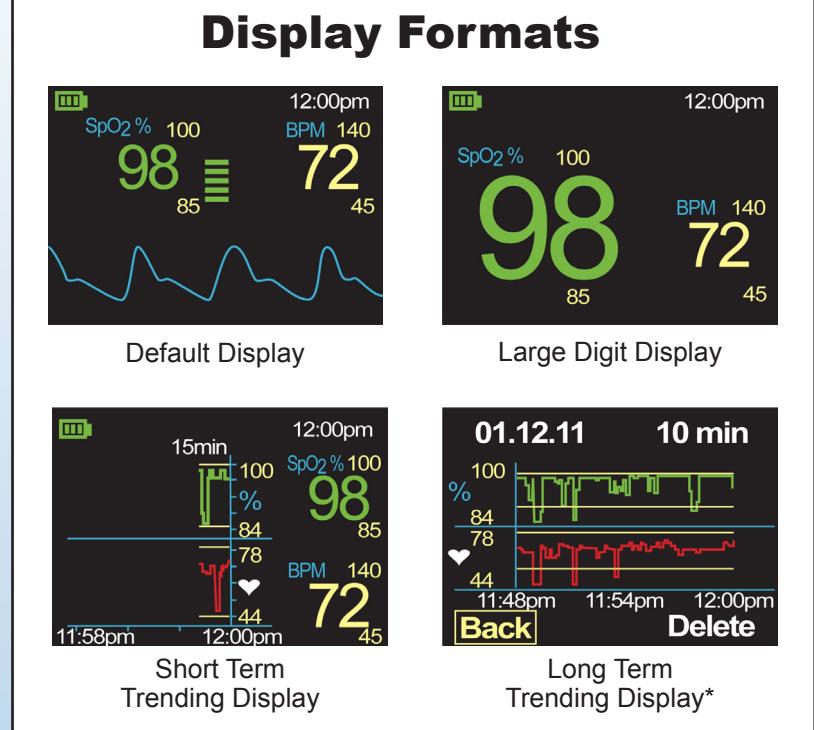
Ear Sensor

A

Also available in Autoclavable version



Actual Size



* Not available on VM-2160-L



Powerful Pulse Oximetry PC Software*

With the convenient Pulse Oximetry PC Software all measured values, selected alarm limits and alarm messages can be transferred to the computer via the USB interface. The data can be viewed on the computer and patient information added. The PC software enables basic statistical evaluation of the stored data.

The software can also be used to display and store the measurement values and alarm messages on the computer in parallel to ongoing measurements. This function is activated by setting the real-time mode of the VM-2160. When this mode is activated, the device transfers the actual measurement values for Pulse Rate measurement values every 4 seconds to the computer via the USB interface.

* Not available with the VM-2160-L



Applications

The VM-2160 with Silicone Finger Sensor is suitable for the following applications:

- Clinical Environments
- Rescue services and emergency medicine
- Sleep screening
- Home care
- Long-term monitoring
- Stress testing