### veterinary



#### 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 display

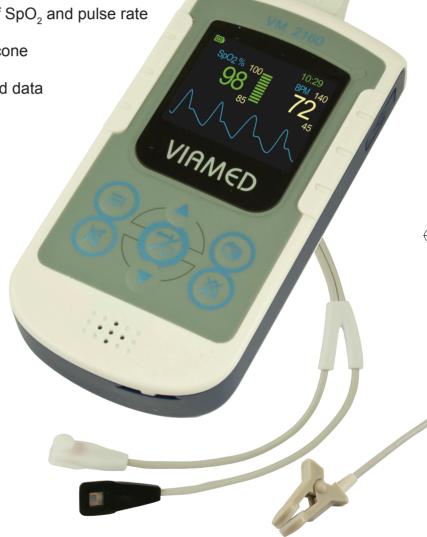
 Robust, ergonomic design with durable silicone protective cover

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 SpO<sub>2</sub>, 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  $SpO_2$  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 for continual patient monitoring.

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





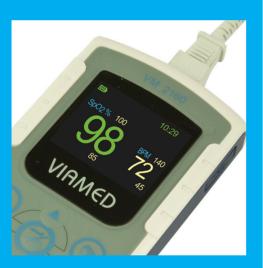
The ergonomic design of the VM-2160 Hand Held Pulse Oximeter combines outstanding performance and reliability in pulse oximetry

#### **Standard Package**

- VM-2160 Pulse Oximeter Monitor
- Reusable SpO<sub>2</sub> sensor\*
- USB data cable
- Silicone protective cover
- PC software
- Instruction manual on CD

\* Please select either Lingual Sensor or Multi-site Y Sensor, and indicate at the time of ordering





VM-2160 Display

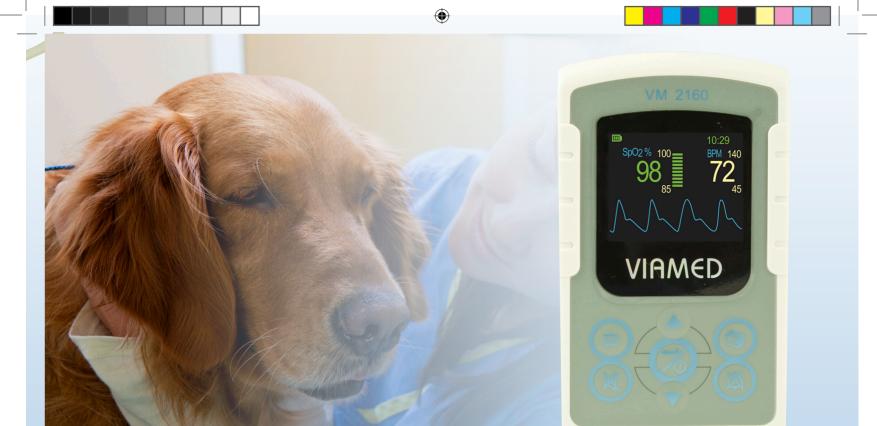


VM-2160 in Protective Cover

## **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 indicates 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 options available for operational control
- Rapid data transfer using a standard USB interface
- Silicone protective cover included in the package
- Powered by standard AA alkaline batteries
- The most modern technologies and energy-saving elements enable continued use of the device over several days





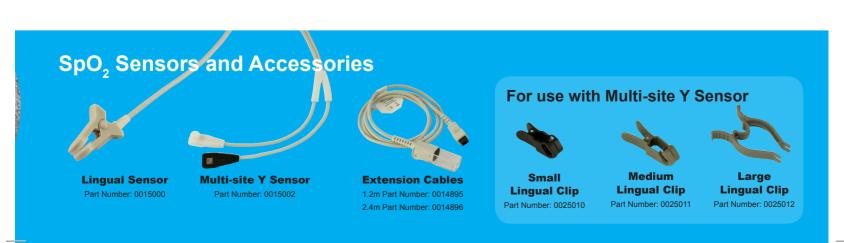
**Actual Size** 

#### **Powerful Pulse Oximetry PC Software**

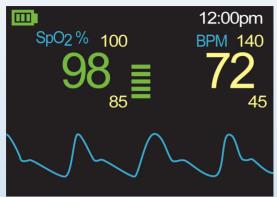


With the convenient Pulse Oximetry PC Software all measured values, selected alarm limits and alarm messages can be transferred to the computer via the USB interface.

The data can be viewed on the computer and patient information added. The PC software enables basic statistical evaluation of the stored data.



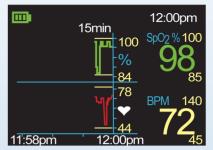
#### **Display Formats**



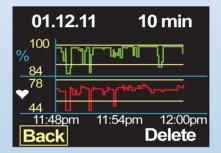
**Default Display** 



Large Digit Display



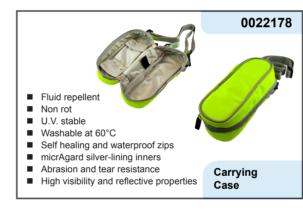
Short Term Trending Display

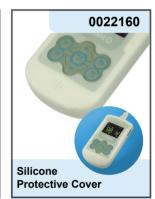


Long Term Trending Display

# **Mounting Options and Accessories**

For use with VM-2160

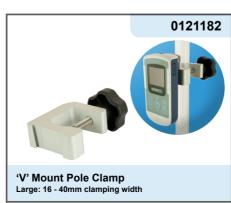
















### VM-2160 Hand Held Pulse Oximeter

Measuring Range	
SpO <sub>2</sub> Pulse Rate	0 - 100% 20 - 300 bpm
Accuracy	
SpO <sub>2</sub> (70 - 100%)	±2%
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, 65,000 colours, 128 x 160 pixels
Data displayed	Oxygen saturation, pulse rate, plethysmogram,
	bar graph, short and long term trends
Indicators	Signal quality, pulse amplitude, battery status, alarm silenced,
Hidicators	volume silenced, sensor detection, sensor disconnection
Trend Information	
Short term trend	15 / 30 / 240 minutes
Long term trend	> 480 hours, maximum 50 datasets
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
	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	IP32
Dimensions	118 mm (L) x 60 mm (W) x 25 mm (H)
Weight	Approximately 160g (including batteries, without sensor)
Power Supply	3 x AA alkaline batteries
Battery Life > 2 days continuo PC interface	ous operation or approximately 5 days in economy power mode USB 2.0
Part Numbers	
VM-2160*	0012175
* Language package: Central European, including:	on Deliah Darkovosa and Cranish
English, Afrikaans, Dutch, French, German, Hungarian, Italia	III, Polish, Portuguese and Spanish
Additional Accessories Available	0045000
Multi-site Y Sensor Lingual Sensor	0015002 0015000
Lingual Clip (Small)	0013000
Lingual Clip (Medium)	0025011
Lingual Clip (Large)	0025012
Pulse Oximetry Extension Cable, 1.2m cable length (XT6500	
Pulse Oximetry Extension Cable, 2.4m cable length (XT6501	0014896
Silicone Protective Cover	0022160
Carrying Case	0022178
Universal Mounting Plate, V-adapter with female pole-mount	
'V' mount wall plate 'V' mount pole clamp (Small: 14 - 25mm clamping width)	0121180 0121181
'V' mount pole clamp (Small: 14 - 25mm clamping width) 'V' mount pole clamp (Large: 16 - 40mm clamping width)	0121182
'V' mount rail clamp	0121184

NB. When ordering the VM-2160 please select from the following reusable sensor styles:
Standard Lingual Clip Sensor or Multi-Site Y sensor (supplied with a choice of lingual clip - small, medium or large) and indicate at the time of ordering.

0121184

0121197 0121200

'V' mount pole clamp, horizontal Universal Mounting Clamp, with vertical and horizontal adjustments

Specifications subject to change.

'V' mount rail clamp

<sup>\*</sup> in accordance with ISO 9919:2005 Standards.

N.B. The universal mounting plate is required when using any of the above mounting options.



Distributed by:



Part Number: 0092173 Date: 10/18



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