

## VM-2160

### Hand Held Pulse Oximeter

Designed with the most difficult conditions in mind

- For spot checking or constant monitoring of SpO<sub>2</sub> and pulse rate
- Clear and bright, colour 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 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<sub>2</sub> 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 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.

## The VM-2160 offers a efficient and cost effective solution for spot monitoring or constant monitoring of SpO<sub>2</sub> and Pulse rate

- For spot checking or constant monitoring of SpO<sub>2</sub> 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

\* 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.



VM-2160 Display



VM-2160 in Protective Cover

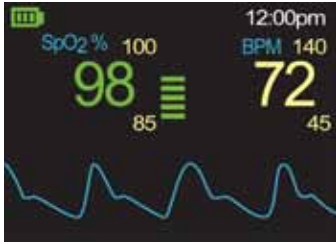
## Key features of the VM-2160 Hand Held Pulse Oximeter

- 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 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 options 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
- Powered by standard AA alkaline batteries

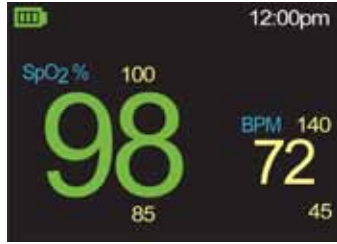


**Silicone Soft Sensor for VM-2160. Other types available on request**

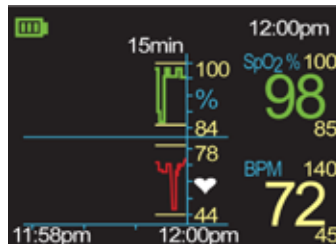
## Display Formats



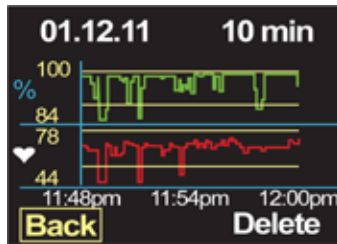
Default Display



Large Digit Display



Short Term Trending Display



Long Term Trending Display



Actual Size

## Sensors and Cables

### Adult Finger Sensor



0014650

Reusable Adult Finger Sensor  
1.2m cable length

### Adult Silicone Sensors



0014755

Reusable Adult Silicone Soft Sensor  
0.3m cable length

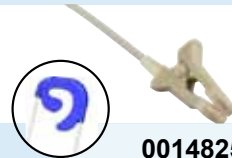
### Paediatric Silicone Sensors



0014756

Reusable Paediatric Silicone Soft Sensor  
0.3m cable length

### Ear Sensor



0014825

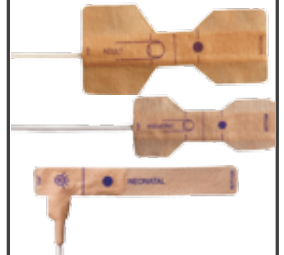
Reusable Ear Sensor  
1.2m cable length

### Disposable Sensors



Disposable Transpose Tape  
Box of 24 sensors

Adult 0014989  
Paediatric 0014990



Disposable Plaster Tape  
Box of 24 sensors

Adult 0014993  
Paediatric 0014994  
Infant 0014995  
Neonatal 0014996

### Silicone Wrap Sensor



0014835

Reusable Silicone Wrap Sensor  
1.2m cable length

Reusable Adult Silicone Soft Sensor  
1.2m cable length

Reusable Paediatric Silicone Soft Sensor  
1.2m cable length

### Extension Cables



0014895

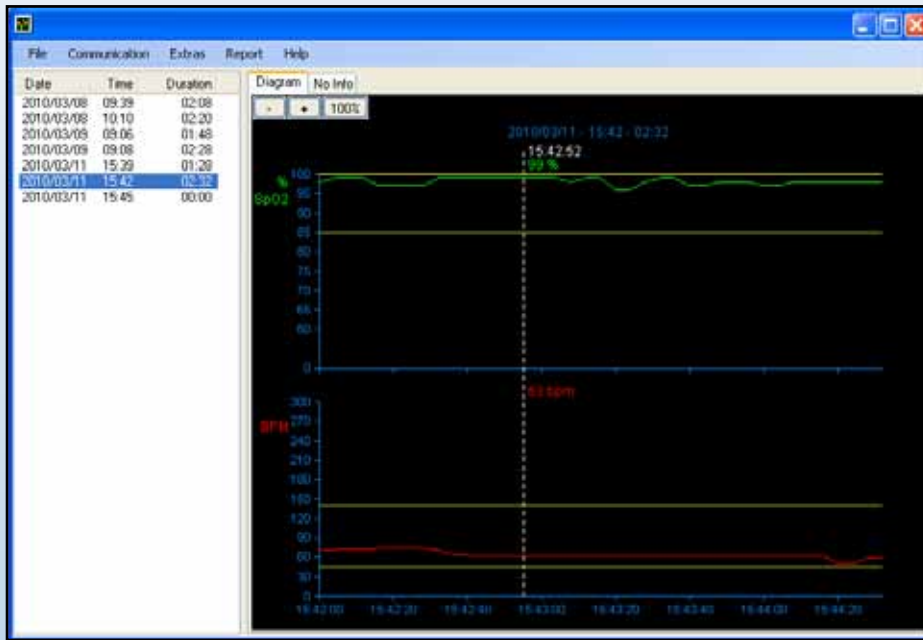
Pulse Oximetry Extension Cable  
1.2m cable length

0014896

Pulse Oximetry Extension Cable  
2.4m cable length



# 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.

## Mounting Options and Accessories

For use with VM-2160

- Fluid repellent
- Non rot
- U.V. stable
- Washable at 60°C
- Self healing and waterproof zips
- micrAgard silver-lining inners
- Abrasion and tear resistance
- High visibility and reflective properties

0022178

Carrying Case

0022160

Silicone Protective Cover

0022171

Universal Mounting Plate

0121180

'V' Wall Mount

0121181

'V' Mount Pole Clamp  
Small: 14 - 25mm clamping width

0121182

'V' Mount Pole Clamp  
Large: 16 - 40mm clamping width

0121184

'V' Mount Rail Clamp

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

0121200

Universal Mounting Clamp

0014890

Sensor Wraps  
Pack of 12

0021013

Posey Wrap  
Pack of 12 - 6554

0021018

Posey Wrap Paediatric  
Pack of 12 - 6554P

## Applications

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

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



<b>Measuring Range</b>	
SpO <sub>2</sub>	0 - 100%
Pulse Rate	20 - 300 bpm
<b>Accuracy</b>	
SpO <sub>2</sub> (70 - 100%)	±2%
Pulse Rate	± 1 digit (≤100 bpm) ± 1% (>100 bpm)
<b>Optical Specifications</b>	
Red emitter	660nm, typ 3.5mW
Infra-red emitter	905nm, typ 3.5mW
<b>Display</b>	
Features	Colour, 65,000 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
<b>Trend Information</b>	
Short term trend	15 / 30 / 240 minutes
Long term trend	> 480 hours
<b>Environmental Conditions</b>	
Operating temperature	-20 - 50°C , 15 - 95% RH, 600 - 1300 hPa
Storage temperature	-30 - 70°C, 10 - 95% RH, 600 - 1500 hPa
<b>Regulatory Approvals</b>	
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
<b>Assembly</b>	
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 continuous operation or approximately 5 days in economy power mode
PC interface	USB 2.0
VM-2160*	
EAN-13 (GTIN-13) Barcode: 5051826000007	0012160
NATO Stock Number: 6515-99-915-8170	
* 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
<b>Additional Accessories Available</b>	
Sensor Wraps - for use with 0014835 and 0014592 Silicone Wrap Sensors	0014890
Posey Sensor Wraps - 6554	0021013
Posey Sensor Wraps - Paediatric - 6554P	0021018
Silicone Protective Cover	0022160
Carrying Case	0022178
Universal Mounting Plate, V-adaptor with female pole-mount thread (1/4 - 20)	0022171
'V' mount wall plate	0121180
'V' mount pole clamp (Small: 14 - 25mm clamping width)	0121181
'V' mount pole clamp (Large: 16 - 40mm clamping width)	0121182
'V' mount rail clamp	0121184
'V' mount pole clamp, horizontal	0121197
Universal Mounting Clamp, with vertical and horizontal adjustments	0121200
<b>Sensors and Cables</b>	
Reusable Adult Finger Sensor - 1.2m cable length	0014650
Reusable Silicone Wrap Sensor - 1.2 cable length	0014835
Reusable Adult Silicone Soft Sensor - 0.3m cable length	0014755
Reusable Adult Silicone Soft Sensor - 1.2m cable length	0014750
Reusable Paediatric Silicone Soft Sensor - 0.3m cable length	0014756
Reusable Paediatric Silicone Soft Sensor - 1.2m cable length	0014751
Reusable Ear Sensor - 1.2m cable length	0014825
Pulse Oximetry Extension Cable, 1.2m cable length (XT6500)	0014895
Pulse Oximetry Extension Cable, 2.4m cable length (XT6501)	0014896
Disposable Transpore Tape - Box of 24 - Adult	0014989
Disposable Transpore Tape - Box of 24 - Paediatric	0014990
Disposable Plaster Tape - Box of 24 - Adult	0014993
Disposable Plaster Tape - Box of 24 - Paediatric	0014994
Disposable Plaster Tape - Box of 24 - Infant	0014995
Disposable Plaster Tape - Box of 24 - Neonatal	0014996

CE 0086

Distributed by:



**Viamed Limited** · 15 Station Road · Cross Hills  
Keighley · West Yorkshire · BD20 7DT · United Kingdom  
Tel: +44 (0)1535 634 542 Fax: +44 (0)1535 635 582  
Email: [info@viamed.co.uk](mailto:info@viamed.co.uk) Website: [www.viamed.co.uk](http://www.viamed.co.uk)



Part Number: 0092171  
Date: 04/17