



# 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 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 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 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.

Available in two variants...



For spot  
checking  
applications

## VM-2160-L Light

- For spot checking or constant monitoring of SpO<sub>2</sub> and pulse rate.
- Short term trending.

### Standard Package

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



Long term  
monitoring  
and  
trending

## VM-2160

- 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.

### Standard Package

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







**OLED Display**



**VM-2160 in protective cover with antibacterial keypad**

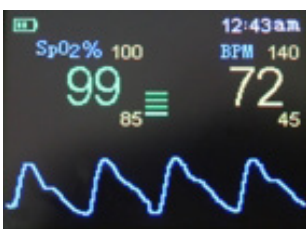


**Standard Finger Sensor for the VM-2160-L**

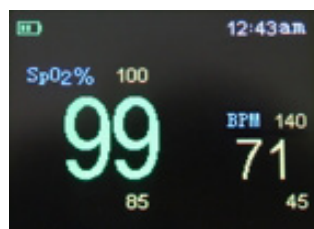


**Silicone Soft Sensor for VM-2160. Other types available on request.**

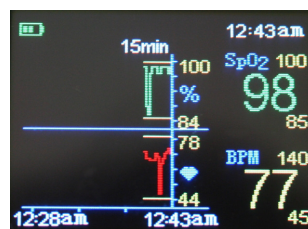
## Display Formats



Default display



Large digit display



Short term trending display



Long term trending display\*

\*Not available on VM-2160-L

# VM-2160 Carrying Accessories



**Armband**

Protective, adjustable neoprene armband allows the patient or operator to wear the VM-2160 pulse oximeter on their arm.

The armband is ideally suited to situations where other methods of mounting the instrument may not be available.

Incorporates a velcro tab to secure excess sensor cable.



## Carrying Case

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

**220 (W) x 100 (H) x 80 (D) mm**



## Carrying Pouch

Same microAgard material as the carrying case. Includes a velcro cable tidy, pocket for cable storage and a clear protective cover for the VM-2160.

**80 (W) x 125 (H) x 65 (D) mm**

See reverse for Technical Specifications...

<b>Measuring Range</b>	
SpO <sub>2</sub>	0 - 100%
Pulse Rate	20 - 300 bpm
<b>Accuracy</b>	
SpO <sub>2</sub> (70 - 100%)	1<3.0% Accuracy A <sub>max</sub> *, ± 1 S.D = 2.0%
Pulse Rate	± 1 digit (≤100bpm) ± 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 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
<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	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
<b>Part Numbers</b>	
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
<b>Part Numbers</b>	
VM-2160*	0012160
EAN-13 (GTIN-13) Barcode: 5051826000007	
NATO Stock Number: 6515-99-915-8170	
NHS Stock Code: FBC204	
* Language package: Central European, including:	
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>	
Reusable Adult Finger Sensor (SF6500)	0014650
Reusable Adult Silicone Finger Sensor, 1.2m cable length (SC6500VM)	0014750
Reusable Paediatric Silicone Finger Sensor, 1.2m cable length (SCP6500VM)	0014751
Reusable Adult Silicone Finger Sensor, Autoclavable, 1.2m cable length (SCA6500VM)	0014590
Reusable Paediatric Silicone Finger Sensor, Autoclavable, 1.2m cable length (SCAP6500VM)	0014591
Reusable Silicone Wrap Sensor, 1.2m cable length (W6500VM)	0014835
Reusable Ear Sensor, 1.2m cable length (EP6500VM)	0014825
Pulse Oximetry Extension Cable, 1.2m cable length (XT6500)	0014895
Pulse Oximetry Extension Cable, 2.4m cable length (XT6501)	0014896
Silicone Protective Cover	0022160
Armband, for use with VM-2160	0022169
Carrying Case	0022178
Carrying Pouch	0022179
Universal Mounting Kit, V-adaptor with female pole-mount thread	0022171
Universal Mounting Clamp, with vertical and horizontal adjustments (CP2345)	0121200
'V' mount pole clamp, horizontal	0121197
'V' mount rail clamp	0121198
'V' mount pole clamp (CP2344)	0121201
'V' mount wall plate (B 647)	0121202

\* in accordance with ISO 9919:2005 Standards.

CE 0086

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

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Part Number: 0000000  
Date: 11/10



BS EN ISO 9001:2008  
ISO 13485:2003