### pulse oximetry

### VM-2160

### Hand Held Pulse Oximeter



The ergonomic VM-2160 hand held pulse oximeter has the durability of a compact and lightweight hand held unit for spot checking of  $SpO_2$ , 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 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.

# Key features of the VM-2160 Hand Held Pulse Oximeter Self-explanatory and ergonomic functions enable intuitive operation

- 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



VM-2160 Display



VM-2160 in Protective Cover

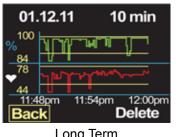




Silicone Soft Sensor for VM-2160. Other types available on request

## 





Long Term Trending Display



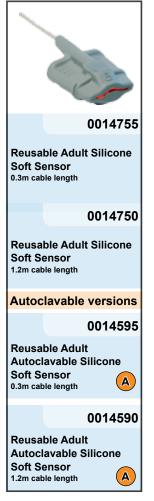
### **Sensors and Cables**

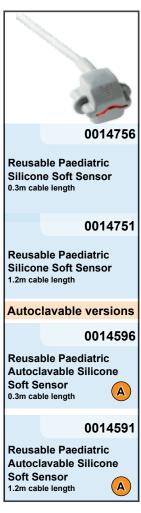
**Short Term** 

Trending Display





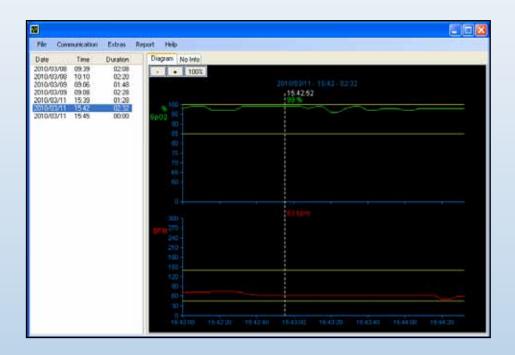








### **Powerful Pulse Oximetry PC Software**



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

Universal

**Mounting Plate** 

N.B.: The universal mounting

plate is required when using any of the mounting options shown.

0022171



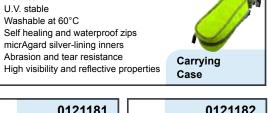




Fluid repellent Non rot

0121181

UV stable Washable at 60°C



0022178







Silicone

**Protective Cover** 

0022160





### **Applications**

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

Clinical Environments

**Posey Wrap** 

Pack of 12 - 6554

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

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

**Accuracy** 

SpO<sub>2</sub> (70 - 100%) ±2% Pulse Rate ± 1 digit (≤100 bpm) ± 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 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 -30 - 70°C, 10 - 95% RH, 600 - 1500 hPa Storage temperature

**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 **Dimensions** 118 mm (L) x 60 mm (W) x 25 mm (H) Approximately 160g (including batteries, without sensor) Weight Power Supply 3 x AA alkaline batteries. **Battery Life** > 2 days continuous operation or approximately 5 days in economy power mode **USB 2.0** PC interface

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 0012164

VM-2160 - Asia II languages (English, Japanese and Korean)

Additional Accessories Available 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-adapter 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

0121184 'V' mount rail clamp 'V' mount pole clamp, horizontal 0121197 Universal Mounting Clamp, with vertical and horizontal adjustments 0121200 Sensors and Cables

Reusable Adult Finger Sensor - 1.2m cable length 0014650 Reusable Silicone Wrap Sensor - 1.2 cable length 0014835 Reusable Autoclavable Silicone Wrap Sensor - 1.2m cable length 0014592 Reusable Adult Silicone Soft Sensor - 0.3m cable length 0014755 Reusable Adult Silicone Soft Sensor - 1.2m cable length 0014750 Reusable Adult Autoclavable Silicone Soft Sensor - 0.3m cable length 0014595

Reusable Adult Autoclavable Silicone Soft Sensor - 1.2m cable length 0014590 Reusable Paediatric Silicone Soft Sensor - 0.3m cable length 0014756 Reusable Paediatric Silicone Soft Sensor - 1.2m cable length 0014751 Reusable Paediatric Autoclavable Silicone Soft Sensor - 0.3m cable length 0014596 Reusable Paediatric Autoclavable Silicone Soft Sensor - 1.2m cable length 0014591

0014825 Reusable Ear Sensor - 1.2m cable length Pulse Oximetry Extension Cable, 1.2m cable length (XT6500) 0014895 Pulse Oximetry Extension Cable, 2.4m cable length (XT6501) 0014896

0014989 Disposable Transpore Tape - Box of 24 - Adult 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



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