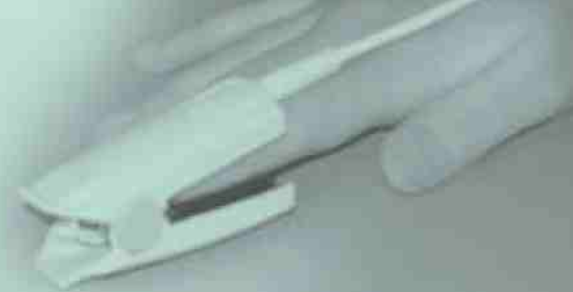pulse oximetry

VM-2160

Hand Held Pulse Oximeter

Designed with the most difficult conditions in mind.

- **For spot checking or constant monitoring of SpO$_2$**
- **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 48 hours of trend data**
- **Adjustable high and low alarms**

The ergonomic VM-2160 hand held pulse oximeter has been designed with the most difficult conditions in mind. It 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 48 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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VM-*2160* Hand Held Pulse Oximeter

Measuring Range
SpO$_2$	0 - 100%
Pulse rate	20 - 300 bpm

Accuracy
SpO$_2$	A$_{RMS}$ = 1.8 (70 - 100%)
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 OLED, 262,000 colours, 128 x 160 pixels
Data displayed	Oxygen saturation, pulse rate, plethysmogram, bar graph, short term and long term trends.
Indicators	Signal quality, pulse amplitude, battery status, alarm silenced, volume silenced, sensor detection, sensor disconnection.

Trend Information
Short term trend	15 min / 30 min / 240 min
Long term trend	up to 48 hours

Environmental Conditions
Operating temperature	0 - 50 °C, 15 - 95% RH, 600 - 1300 hPa
Storage temperature	-20 - 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	Splash proof
Dimensions	11.8cm (l) x 6cm (w) x 2.5cm (h)
Weight	approx. 160g (with 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*	0012160

Standard accessories included:
1 x Reusable Adult Silicone Finger Sensor
1 x PC Software
1 x USB Data Cable
1 x Silicone Protector Cover
3 x AA Batteries

*Language Package: Central European, including:
English, Afrikaans, Dutch, French, German, Hungarian, Italian, Polish, Portuguese and Spanish.

VM-2160 - Scandinavian languages (English, Danish, Dutch, Finish, 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

Accessories
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 Silicone Wrap Sensor, 1.2m cable length (W6500VM)	0014835
Pulse Oximetry Extension Cable, 1.2m cable length (XT6500)	0014895
Pulse Oximetry Extension Cable, 2.4m cable length (XT6501)	0014896
Silicone Protective Cover	0022160
Carrying Bag, with shoulder strap	0022170
Armband, for use with VM-2160	0022169
Universal Mounting Kit, V-adapter 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
Battery 1.5V AA (single item)	9950050

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

VM-2160 OLED Display

VM-2160 in Protective Cover

Silicone Finger Sensor for use with VM-2160
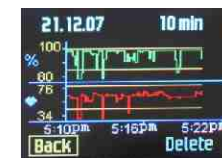
Display Formats

Default Display

Large Digit Display

Short Term
Trending Display

Long Term
Trending Display

CE0086
Specifications subject to change

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