MEDIAID



SpO₂ - Pulse Rate - Waveform

The Small OEM Board with BIG Monitoring Performance

Sensitivity

The M15HP is engineered to pick up signals that are as low as 0.1% perfusion.

Monitoring with DSP Technology

The M15HP Board uses digital signal processing technology for measuring oxygen saturation, and pulse rate. Signal filtering and complex noise analysis increases accuracy while decreasing measurement errors.

Serial Communication

The M15HP has a 5 pin connector containing a bi-directional TTL serial interface for communication, pulse beep, power, and ground. The serial output transmits status, oxygen saturation, pulse rate, plethysmographic waveform, two digitized spare analog channels, and control parameters.



Model 15HP (larger than actual size)

Product Information

M15HP Pulse Oximeter Board PN/REF POX 010-M15HP (%SpO₂, Heart Rate) Includes: M15HP Board, Sensor of Choice

M15HPE Pulse Oximeter Evaluation Kit PN/REF POX 101-M15HPE Includes: M15HP, M15HPE Board, Sensor of Choice, Serial Cable, Interface Cable, Documentation, Evaluation Software

Easy and Convenient Integration

The M15HP fits into a small space behind a front panel. Connection and mounting holes are easily accessible for quick assembly of medical devices.

Smallest Size

The M15HP is just 2.3 inches (5.9 cm) x 1.2 inches (3.0 cm), making it ideal for compact medical equipment.

Excellent Technical Support

Mediaid Inc. provides extensive engineering support to OEM customers.

17517 Fabrica Way, Suite H; Cerritos, CA 90703 USA p 714.367.2848 f 714.367.2852 www.mediaidinc.com info@mediaidinc.com





Monitoring Performance

Range SpO₂ 20 – 100% Pulse 25 – 250 bpm

Resolution SpO₂ 1% Pulse 1 bp

Pulse 1 bpm Accuracy SpO₂ $70 - 100\% \pm 2$

 $60 - 69\% \pm 3$ < 60% Unspecified

Pulse $25 - 200 \text{ bpm} \pm 2 \text{ or } 2\% \text{ (whichever is greater)}$

200 – 250 bpm ± 3%

Response SpO₂ 8 seconds for 80% of patients

Pulse 8 seconds for 80% of patients

Perfusion Rate 0.1% to 20% Digital Pleth Waveform:

Centered at 512, norm is 512 counts peak-to-peak

Sensors

Mediaid Inc Pulse Oximetry Sensors with Compushield® Connector Mediaid Inc Veterinary Sensors with Compushield® Connector

Serial Interface

Level + 5V TTL

Protocol Bidirectional RS-232 Format

Baud Rate 19200
Data Field 8 bits
Stop Bits 1
Parity None

General

Dimensions

M15HP 2.3L x 1.2W x 0.9H in

5.9L x 3.1W x 2.3H cm

Power Source External 4.8V to 16.5V 10 mA RMS

Max Ripple 0.2V

Environmental Conditions

Operating Conditions

Atmospheric Pressure 795 – 526 mmHg

1060 - 700 hPa

Relative Humidity 5-95% (Non Condensing)

Temperature $32 - 104^{\circ}F (0 - 40^{\circ}C)$

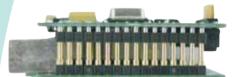
Storage & Transport Conditions

Atmospheric Pressure 795 – 375 mmHg

1060 - 500 hPa

Relative Humidity 10 – 100%

Temperature $-40 - 158^{\circ}F (-10 - 70^{\circ}C)$





M15HP (shown actual size)