



TOOLS OF THE TRADE

PALM-SIZED SpO2 SIMULATOR

PULSE OXIMETRY IS A HIGHLY UTILIZED VITAL SIGN FOR MONITORING PATIENTS IN HOSPITALS AND OUTPATIENT CLINICS, requiring routine service and maintenance from biomedical engineers. Commonly referred to as SpO2 monitors, there are a wide range of manufacturers offering these products, thus creating a challenge for biomedical engineers to manage multiple vendors within the same facility.

In order to help streamline the service of these products, Sun Valley, Calif.-based Pronk Technologies has developed the OxSim®, a creative SpO2 simulator designed to ensure all these technologies can be easily tested and with greater efficiency.

Weighing only 5 ounces, the palm-sized OxSim is the smallest optical SpO2 simulator on the market. This handheld simulator runs on batteries and enables biomedical engineers to easily test the entire pulse oximeter, including the extension cable and sensor. The OxSim is compatible with a wide range of

manufacturers, including all major pulse oximetry technologies. Plus, its unique design is intended to provide biomedical engineers with the flexibility to conduct their testing anywhere in an easy-to-use, cost-effective manner.

KEY FEATURES

The OxSim's key features include:

- Automatic detection of the manufacturer
- Four SpO2 saturation settings: 85 percent, 95 percent, 98 percent, 99 percent
- Three pulse rates: 40, 80, 140 BPM
- Low perfusion simulation
- Infrared and red detection LEDs for cable/sensor continuity testing
- Runs for 10 hours on a single AA battery
- A four-year warranty
- Rugged: Passes 50 drop tests
- Power save mode: Automatically shuts off when not in use

Another key feature of the OxSim is the low perfusion simulation. When selected, the perfusion index is decreased to one-tenth of a healthy patient. This provides biomedical engineers with an easy method for testing the sensitivity of the sensor and oximeter to verify that it can accurately capture a reading when used on patients with very low perfusion.

The OxSim is also designed to be very rugged. According to Greg Alkire, vice president of sales and marketing at Pronk Technologies, "Utilizing a polycarbonate enclosure similar to Lexan enabled us to design the OxSim to pass vigorous drop testing requirements, including being dropped 50 times from 3.5 feet and still functioning within specifications," he says. "We believe that when you combine the design with our four-year warranty, it provides a tremendous value for any customer testing SpO2 monitors."

For more information regarding this product, contact 800-609-9802 or visit www.pronktech.com.

REINVENTING BIOMEDICAL TOOLS

The OxSim is designed for easy operation with just a single button to select the desired setting. It also has some very unique features, such as the ability to automatically detect pulse oximetry technologies including Masimo, Nellcor, Nonin, Dolphin, BCI, proprietary technologies from various patient monitoring manufacturers, and many others.

