

Lifeguard FAQ



What is Lifeguard?

Lifeguard is the world's first wearable, wireless vital signs monitor designed for extreme environments.

What are the parts of Lifeguard?

Lifeguard consists of a wearable computer (the CPOD) and display/analysis software running on a base station (laptop, tabletPC, or PocketPC).

What does a CPOD measure?

The CPOD measures ECG (2 leads, typically lead II and V5), respiration (induction), pulse oximetry, heart rate, blood pressure, and temperature (skin or ambient). In addition, it has a built-in 3-axis accelerometer for determining body orientation and activity.

How long does a CPOD operate?

The CPOD device can run for up to 24 hours on two AAA batteries. It presently has enough memory for storing 8 hours of physiological data. We are actively working on making the memory virtually unlimited.

Who developed Lifeguard?

A joint team from the NASA Ames Research Center (Astrobionics) and Stanford University (National Center for Space Biological Technologies/National Biocomputation Center) in collaboration with the NASA Johnson Space Center (Medical Operations).

Why does NASA need Lifeguard?

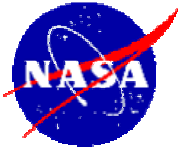
Lifeguard is part of an overall program called Autonomous Medical Care Systems for producing technologies appropriate for long-duration spaceflight. The need for intermittent evaluation of physiology occurs frequently- during exercise, before a potentially hazardous event, and as a medical contingency.

What is Lifeguard good for?

Lifeguard is good for evaluating human physiology whenever a wearable, rugged ambulatory system is required. It was originally designed after a careful analysis of 24 different scenarios for human physiological monitoring and then biased toward those required for NASA use.

What is Lifeguard not designed for?

Lifeguard is not made for continuous, long-term, daily wear. Nor is it made as a replacement to cardiac diagnostic devices (such as Holter monitors). It fills the void between these devices.



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Is Lifeguard FDA 510k approved?

No, at present this is not an FDA approved device and is only used with IRB approval as a secondary diagnostic device.

How do I get one?

At present, we are only providing very limited units through formal research collaborations. We anticipate having more units available by the end of summer 2004 and will be able to expand our collaborations a bit at that point. Please see our contacts page to send email to the team if you are interested in working with us! There is currently no way to buy a unit although we are actively working on commercialization.