# Research Ring



# Lab on a Finger: EDA, Pulse, Temp, ECG

# Research-quality Biometric Data in a Powerful, Wearable Device

The Research Ring is a revolutionary research platform that enables the capture of high-quality biometric data—EDA, PPG, Temp, ECG—on a single, small, user-friendly device.



Data is collected on an iOS device then automatically uploaded to the cloud. Data can also be streamed to Acq*Knowledge* in real time for in-lab studies or imported into Acq*Knowledge* asynchronously from the cloud or from a raw data file.

Longitudinal, Real-world, and Lab Studies

# Comfortable, Adjustable Ring

## Research-quality, Biometric Data

## Collect Data Anywhere

Lightweight, adjusts to different finger sizes

Collect EDA, PPG, Temp, and ECG plus derived signals

Lab, work, home, school, in the wild

### Customize Data with Selectable Modes

# Bluetooth BLE Communications

## **Long Battery life**

Select signals and sample rates

Collect and stream to iPhone, iPad, or Acq*Knowledge* 

8 to 15 hours based on sampling rates

# Integrates with BIOPAC Devices

# Streams to Acq*Knowledge* Software

# Acq*Knowledge* In-lab Video Integration

Add signals for comprehensive physiology monitoring

Real-time data viewing, access, and analysis

Add up to 8 Cameras and synchronize data in Acq*Knowledg*e

## **Collect Data from Single or Multiple Participants**

Connect 9 rings to a single iOS device or computer running Acq*Knowledge*Start and host all sessions simultaneously using Acq*Knowledge* 

Combine with Eye Tracking, fNIRS, VR, and Other Physiology Signals



# **Applications**

Psychophysiology

Lifestyle—stress, sleep, etc.

Mental health and wellness

User experience and ergonomics

Consumer insights

Media and communications

Longevity and aging

General health tracking

## **Use Cases**

Trauma and stress analysis
Food and mood
Pain assessment
Classroom engagement
Movie and TV engagement
Meditation and mindfulness
Extreme emotions
Sleep monitoring
Stimulus presentation and VR

# **Participants**

Individuals

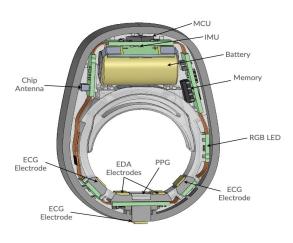
Small groups

Large groups

Geographically distributed groups



# Research Ring—Lab on a Finger



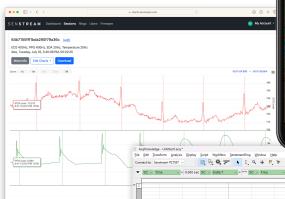
Durable, gold-plated sensors

**Export and save** raw data locally

**Access & Download Raw Data Filtered Data All Data** 

**Capture high-quality** data in an iOS app

**Upload data to the cloud** 



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Stream data to AcqKnowledge Software



# **Easily Collect, Transmit, Analyze Biometric Data**

#### **Electrodermal Data**

The first ring form factor device that captures lab-quality electrodermal activity (EDA), enabling new types of research

#### **Pulse**

Capture photoplethysmography (PPG) data

#### **Temperature**

Body temp measured at the finger

## **Electrocardiogram**

Available when second point of contact is made

## **Mobile and Cloud Apps**

Start capturing data with just a ring and iPhone app, which seamlessly connects to the cloud

## **BIOPAC Integration**

Use with AcqKnowledge Research Ring Software to record in real time or import into AcqKnowledge from the cloud

**Contact BIOPAC to request a demo!** 



