

Application Description

Utilize the powerful on-line analysis capabilities of *AcqKnowledge* software for chronic, acute and in vitro preparations in both long- and short-term experiments for human and animal subjects. Pre-program the software to synchronize recording sessions with a user-specified dosing routine. Sophisticated algorithms provide on and offline, beat-by-beat analysis of the primary cardiovascular signals such as blood pressure, cardiac output, ECG, and left ventricular pressure. Advanced data reduction features perform automatic statistical measurements and multiple display modes allow users to view the data in a familiar format. *AcqKnowledge* displays the data in a variety of formats for quick and easy viewing.

Advanced Features

- Cardiac Output Estimate from BP
- Respiration Sinus Arrhythmia
- Automated ECG Analysis
- Left Ventricular Pressure (LVP) Analysis
- Pressure-Volume Loop Analysis
- And [More](#)

Watch [Video Tutorials](#) at the [BIOPAC Website](#)!

Selected Research Citations Below

[Search online](#) for more than 8,340 BIOPAC citations for Cardiovascular Hemodynamics

Wireless Transmission of Heart Rate and Blood Pressure Measurements for Remote Patient Monitoring

Elif Cigdem Türk, et al (2019). Medical Technologies National Conference (TIPEKNO)

Arterial Baroreceptors Sense Blood Pressure through Decorated Aortic Claws

Soohong Min et al (2019). Cell Reports, Vol 29, Issue 8

Early Onset Neurocirculatory Response to Static Handgrip is Associated with Greater Blood Pressure Variability in Women with Post-Traumatic Stress Disorder

Jeung-Ki Yoo, et al (2019). American Journal of Physiology-Heart and Circulatory Physiology, Vol 318, No 1

Blood Pressure Reaction to Negative Stimuli: Insights from Continuous Recording and Analysis

Avigail Wiener, al (2019). Society for Psychophysiological Research

Ambulatory Pulse Pressure, Brain Neuronal Fiber Integrity, and Cerebral Blood Flow in Older Adults

Takashi Tarumi, et al (2019). SAGE Journal of Cerebral Blood Flow & Metabolism, Vol 39, Issue 5

The Physiology of Art: The Effect of Coloring on Blood Pressure and Heart Rate as Measures of Stress

Casey Leigh Morris, (2019). Texas State University Thesis

Salt Restriction Lowers Blood Pressure at Rest and during Exercise Without Altering Peripheral Hemodynamics in Hypertensive Individuals

Stephen M. Ratchford, et al (2019). American Journal of Physiology-Heart and Circulatory Physiology, Vol 317, No 6

Noninvasive Assessment of Aortic Pulse Wave Velocity by the Brachial Occlusion-Cuff Technique: Comparative Study

Vratislav Fabian, et al (2019). Sensors, Vol 19, Issue 16

A Reflective Photoplethysmogram Array and Channel Selection Algorithm for Weighing Scale Based Blood Pressure Measurement

Andrew M. Carek, et al (2019). IEEE Sensors Journal

Increased Respiratory Modulation of Blood Pressure in Hypertensive Patients

Lin Xie, et al (2019). Frontiers in Physiology