

## PRODUCT BRIEF

### ECG Kilohertz Visualization (EKV™) Software

January 14, 2013.

**Part No:** 50226

**Item:** EKV (ECG Kilohertz-based Visualization) Software

#### Description:

This next generation of EKV Software for the Vevo® 2100 provides line-based reconstruction and measurements of the mouse cardiac cycle. It includes:

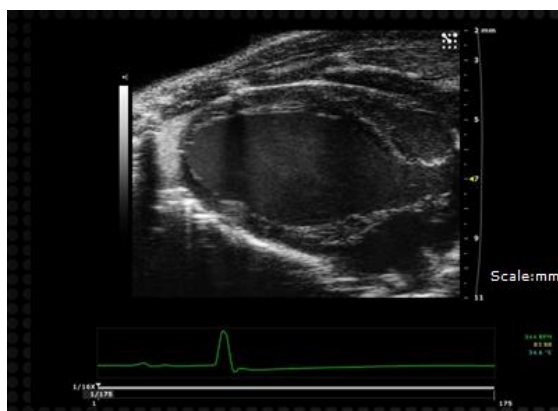
- Cine loop image reconstruction from 750–10,000 frames per second
- Improvement in acquisition time over the previous generation version (10-20 times faster)
- Live on-screen ECG tracing with advanced ECG detection
- Live and post-processed respiration gating
- High-quality image alignment
- Ability to perform post-processing

#### Target Release date:

January 2013

#### Software Compatibility:

Version 1.5.0+



**Image:** Parasternal long axis view of the left ventricle of an adult mouse using EKV.

## **ECG Kilohertz Visualization (EKV <sup>™</sup>) Software**

EKV software is an image acquisition mode that utilizes image reconstruction on a line-by-line basis to produce cardiac cine loops with the highest temporal resolution possible. These cine loops are acquired at high frame rates ranging from 750 to 10,000 frames per second to support imaging of fast-moving structures in the small-animal heart, such as valves or the myocardium itself.

There are advantages to acquiring data with EKV, since it relies on averaging data over multiple heart cycles. These advantages include:

- Improvement in overall image quality
- Ability to clearly visualize blood-flow patterns
- Contributes to data integrity since a single measurement placed on an EKV image represents an average of multiple heart cycles

Other features and benefits of EKV include:

<b>Features</b>	<b>Benefits</b>
<b>Higher frame rate</b>	<b>High-resolution of gross anatomical cardiac pathologies</b>
<b>Faster acquisition time</b>	<b>High-throughput work flow</b>
<b>Post-processing tools including Vevo<sup>®</sup> Vasc Ultra</b>	<b>Quantification of cardiac and vascular function</b>
<b>ECG and respiration gating</b>	<b>Artifact-free imaging</b>

For more information on EKV Software, contact VisualSonics:

[info@visualsonics.com](mailto:info@visualsonics.com)

1.416.484.5000

Toll Free (North America) 1.866.416.4636

Toll Free (Europe) +800.0751.2020