**VolumeCheck™ Product Line**

Automated Non-Contact Liquid Level Detection

---

**Features**

- Collects and outputs sample volume data for each well position
- Works with common lab solutions such as water, alcohol, buffer, DMSO and more
- No consumables – works with your sample racks and plates!

**Ideal for integration with liquid handlers!**

---

**VolumeCheck**

<table>
<thead>
<tr>
<th></th>
<th>VolumeCheck 50</th>
<th>VolumeCheck 100</th>
<th>VolumeCheck 384</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compatible With</strong></td>
<td>PCR Plates</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deep well blocks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assay plates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 well</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>48 well</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>96 well</td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>384 well</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td>96 well plate in 3 min</td>
<td>96 well plate in 1 min</td>
<td>384 well plate in 1 min (Standard Mode), 384 well plate in 30 sec (Fast Scan Mode)</td>
</tr>
<tr>
<td><strong>Max Labware Height</strong></td>
<td>Compatible with vials or tubes up to 52 mm in height</td>
<td>Vials or tubes up to 92 mm in height</td>
<td></td>
</tr>
</tbody>
</table>

---

**Software**

- Project-based software for multiple types of applications and labware
- Outputs data in easy-to-use LIMS formats
- Select rows or columns to scan for efficient throughput
- Includes plate data calibration table utility
- ActiveX toolkit available for integration projects
- Prints plate reports

---

**Non-Contact Technology**

**VolumeCheck Sensor**

Sensor Measures

Sensor-to-Sample Distance

Well Plate Position

---

*The VolumeCheck™ is used in laboratories around the world for sample volume detection in applications for sample library inventory management, assay plate quality control, QC/QA, assay development, and DNA processing. The most common use is for sample volume detection for incoming plate samples and volume verification for plates before and after liquid handling operations.*

---

**BioMicroLab, Inc.**
2500-A Dean Lesher Dr.
Concord, CA 94520

**Tel:** 925-689-1200
**Email:** sales@biomicrolab.com
**Website:** www.biomicrolab.com
How it Works

VolumeCheck™ measures sensor-to-sample distance of known sample volumes to create a calibration table. The sensor-to-sample distance decreases as larger amounts of sample are added to the well. Using a reference curve specific to each well plate or tube rack, the VolumeCheck instrument returns the volume of sample or compound in each well position.

VolumeCheck Calibration Tables

A sensor distance-to-volume calibration plot is generated by scanning known sample volumes in specific well plates or tube racks. The VolumeCheck software provides a utility to efficiently generate the data to establish the distance-to-volume calibration tables. The volumes of unknown samples are scanned and extrapolated from a reference table.

System Resolution and Accuracy

The VolumeCheck system is a general purpose volume detection system for a wide variety of labware. The VolumeCheck liquid level sensor is capable of sensing changes in sample volume in the sub 2-3 μL range for 384 well plates, in the sub 10 μL range for 96 well plates.

The VolumeCheck system resolution can be maximized by:
- Centrifuging sample plates to provide a consistent sample meniscus level
- Ensuring the calibration table is optimized to the consumables and type of sample
- Reducing dimensional variation in labware

Utilized Worldwide By
- Genomic Biobanks
- Drug Discovery Laboratories
- Molecular Biology Laboratories