
# automated non-contact liquid level detection

BioMicroLab VC384

## applications

- Low or high sample volume detection in uncapped consumables
- Sample library inventory management
- Assay plate quality control
- QC/QA for assay development and DNA processing
- Detect sample volume for incoming plate samples
- Volume verification for plates before and after liquid handling operations

## features

- Scans a 384 well plate in 30 seconds in Fast Scan Mode and 2-3 minutes in Standard Mode (depends on system settings)
- Scans a 96 well plate in one minute
- Collects and outputs sample volume data for each well position
- Works with common lab solutions such as water, alcohol, buffer, DMSO and more
- Ideal for integration with liquid handlers

## software

- Graphically displays the well plate volumes in columns and rows
- User interface designed for quality control applications
- Project-based software for multiple types of applications and labware
- Select rows or columns to scan for efficient throughput
- Includes plate data calibration table utility
- Easy-to-use Windows based software
- ActiveX toolkit available for integration projects
- Prints plate reports

## labware compatibility

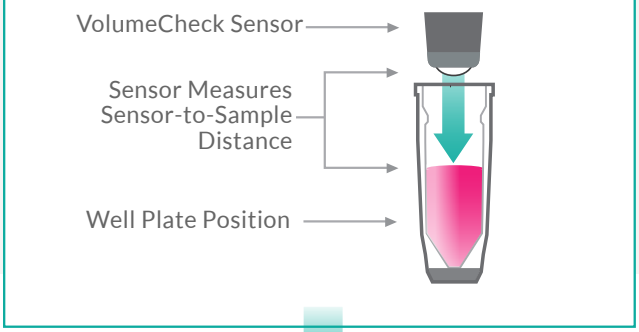
- BioMicroLab racks and well plates
- Compatible with the widest variety of consumables such as 24, 48, 96 and 384 well ANSI/SLAS racks, PCR plates, deep well blocks and assay plates labware from all major manufacturers
- Vials or tubes up to 92 mm height
- No consumables – works with your racks and plates
- No rack adapters needed

sptlabtech

# how it works

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

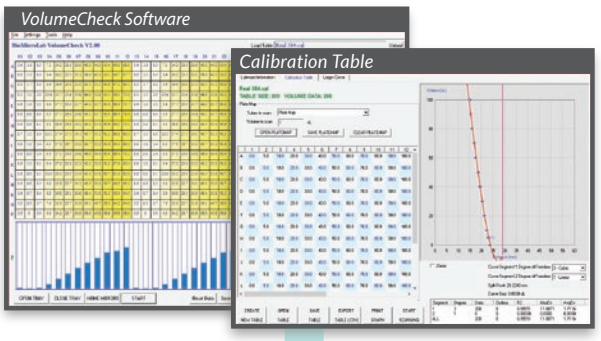
**Ultrasonic Sensor Detects Meniscus**




## VC384™ calibration table

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 curve.

**VolumeCheck Processes Plates Based On Calibration Table**



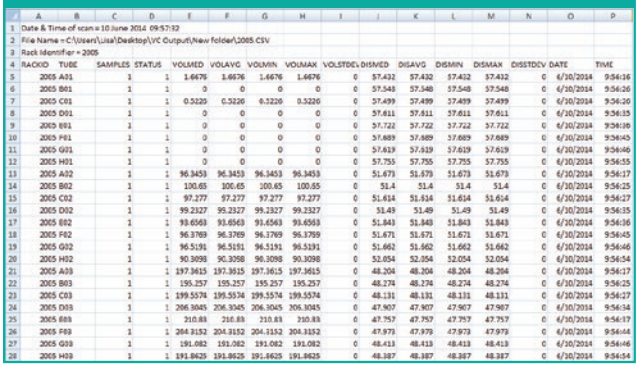

## system resolution and accuracy

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

### VC384™ system resolution can be maximized by:

- Centrifuging sample plates to provide a consistent sample level
- Ensuring the calibration table is optimized to the consumables and type of sample
- Reducing dimensional variation in labware.

**Output Data File Created (.csv)**



| specifications | models | throughput speed | labware supported | 48 and 24 well | 96 well | 384 well |
|---|---|---|---|---|---|---|
| | BioMicroLab VC100 | one minute per plate | up to 52mm High | yes | yes | no |
| | BioMicroLab VC384 | 30 sec-3 min per plate | up to 92mm High | yes | yes | yes |

- Dimensions: 28cm x 68cm x 32cm (11"W x 26.5"D x 12.5"H)
- Weight: 15 kg (33.25 lbs.)
- Electrical: 110-220 VAC 50/60Hz
- System Requirements: Windows 10, 8, 7 • 512MB RAM • One USB port
- IQ/OQ: Installation Qualification / Operational Qualification Available