

automated non-contact liquid level detection

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



3ioMicroLab

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.

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.

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 μ L 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)

4	A	В	с	D	E	F	G	н	1	J.	К	L	м	N	0	Р
1	Date & Tir	Jate & Time of scan = 10 June 2014 09:57:32														
2	File Name = C:\Users\Lisa\Desktop\VC Output\New folder\2005.CSV															
3	Rack Iden	tifier = 200	5													
4	RACKID	TUBE	SAMPLES	STATUS	VOLMED	VOLAVG	VOLMIN	VOLMAX	VOLSTDEV	DISMED	DISAVG	DISMIN	DISMAX	DISSTDEV	DATE	TIME
5	2005	A01	1	1	1.6676	1.6676	1.6676	1.6676	0	57.432	57.432	57.432	57.432	0	6/10/2014	9:56:16
6	2005	801	1	1	0	0	0	0	0	57.548	57.548	57.548	57.548	0	6/10/2014	9:56:26
7	2005	C01	1	1	0.5226	0.5226	0.5226	0.5226	0	57.499	57.499	57.499	57.499	0	6/10/2014	9:56:26
8	2005	D01	1	1	0	0	0	0	0	57.611	57.611	57.611	57.611	0	6/10/2014	9:56:35
9	2005	E01	1	1	0	0	0	0	0	57.722	57.722	57.722	57.722	0	6/10/2014	9:56:36
10	2005	F01	1	1	0	0	0	0	0	57.689	57.689	57.689	57.689	0	6/10/2014	9:56:45
11	2005	G01	1	1	0	0	0	0	0	57.619	57.619	57.619	57.619	0	6/10/2014	9:56:46
12	2005	H01	1	1	0	0	0	0	0	57.755	57.755	57.755	57.755	0	6/10/2014	9:56:55
13	2005	A02	1	1	96.3453	96.3453	96.3453	96.3453	0	51.673	51.673	51.673	51.673	0	6/10/2014	9:56:17
14	2005	B02	1	1	100.65	100.65	100.65	100.65	0	51.4	51.4	51.4	51.4	0	6/10/2014	9:56:25
15	2005	C02	1	1	97.277	97.277	97.277	97.277	0	51.614	51.614	51.614	51.614	0	6/10/2014	9:56:27
16	2005	D02	1	1	99.2327	99.2327	99.2327	99.2327	0	51.49	51.49	51.49	51.49	0	6/10/2014	9:56:35
17	2005	E02	1	1	93.6563	93.6563	93.6563	93.6563	0	51.843	51.843	51.843	51.843	0	6/10/2014	9:56:36
18	2005	F02	1	1	96.3769	96.3769	96.3769	96.3769	0	51.671	51.671	51.671	51.671	0	6/10/2014	9:56:45
19	2005	G02	1	1	96.5191	96.5191	96.5191	96.5191	0	51.662	51.662	51.662	51.662	0	6/10/2014	9:56:46
20	2005	H02	1	1	90.3098	90.3098	90.3098	90.3098	0	52.054	52.054	52.054	52.054	0	6/10/2014	9:56:54
21	2005	A03	1	1	197.3615	197.3615	197.3615	197.3615	0	48.204	48.204	48.204	48.204	0	6/10/2014	9:56:17
22	2005	B03	1	1	195.257	195.257	195.257	195.257	0	48.274	48.274	48.274	48.274	0	6/10/2014	9:56:25
23	2005	C03	1	1	199.5574	199.5574	199.5574	199.5574	0	48.131	48.131	48.131	48.131	0	6/10/2014	9:56:27
24	2005	D03	1	1	206.3045	206.3045	206.3045	206.3045	0	47.907	47.907	47.907	47.907	0	6/10/2014	9:56:34
25	2005	E03	1	1	210.83	210.83	210.83	210.83	0	47.757	47.757	47.757	47.757	0	6/10/2014	9:56:37
26	2005	F03	1	1	204.3152	204.3152	204.3152	204.3152	0	47.973	47.973	47.973	47.973	0	6/10/2014	9:56:44
27	2005	G03	1	1	191.082	191.082	191.082	191.082	0	48.413	48.413	48.413	48.413	0	6/10/2014	9:56:46
28	2005	H03	1	1	191.8625	191.8625	191.8625	191.8625	0	48.387	48.387	48.387	48.387	0	6/10/2014	9:56:54

iii sptlabtech

	models	throughput speed	labware supported	48 and 24 well	96 well	384 well						
ns	BioMicroLab VC100	one minute per plate	up to 92mm High	yes	yes	no						
tio	BioMicroLab VC384	30 sec-3 min per plate	up to 92mm High	yes	yes	yes						
specifica	 Dimensions: Weight: Electrical: System Requi IQ/OQ: 	28cm x 68 15 kg (33 110-220 V/ irements: Windows 1 Installation	 28cm x 68cm x 32cm (11"W x 26.5"D x 12.5"H) 15 kg (33.25 lbs.) 110-220 VAC 50/60Hz nts: Windows 10, 8, 7 • 512MB RAM • One USB port Installation Qualification / Operational Qualification Available 									

Ultrasonic Sensor Detects Meniscus

VolumeCheck Sensor



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