



RION



Hand Held Particle Counter KC-51/KC-52



Hand Held Particle Counter KC-52/KC-51

New streamlined body allows for sample air to flow freely, making it easy to obtain reliable measurements. The ergonomically designed body features a large and easy-to-see display for ease-of-use.

3.5-inch color LCD with touch panel



Unit in stand

SIZE [μm]	Counts
0.3	3621
0.5	287
1.0	31
2.0	12
5.0	1



Data link terminal

SD card slot

USB terminal



SD card

304 mm

KC-52

- Particle size range: 0.3, 0.5, 1.0, 2.0, and 5.0 μm
- Password protection to keep administrator and user access separate
- English and Japanese display selectable
- Equipped with a USB terminal and SD card slot
- Able to connect to the multi-point monitoring system

*IF KC-52 has been used as continuous measurement sensor, we cannot provide the one-year warranty.

87 mm

Multi-feature KC-52 with a touch panel and the easy-to-use, low-priced KC-51 are now available. Both can be used with an eco-friendly rechargeable battery (lithium-ion battery).

Complies to the ISO 21501-4 standard (JIS B 9921). Fully equipped with basic functions and can be used for a variety of contamination control applications.

- Contamination control of cleanrooms
- Environmental control of semiconductor manufacturing plants
- Environmental control of medicine, beverage, and food manufacturing processes, as well as packing processes
- Contamination control of hospitals and medical facilities

KC-51

- Particle size range: 0.3, 0.5, and 5.0 μm
- 3.2-inch monochrome LCD panel
- Equipped with a USB terminal



2 channels display (KC-51)

Display (KC-52)

SIZE [μm]	CUMU	Counts
0.3		3621
0.5		287
1.0		31
2.0		12
5.0		1
Label		SEMICON I
Average	2/3	
Meas Start	2010-12-01 16:45:32	
Meas Time	00:01:00	
Remained Time	00:00:32	
MENU	LAST DATA	INFO
COUNT		

Display (with English status indication)

粒径 [μm]	累積	個
0.3		3621
0.5		287
1.0		31
2.0		12
5.0		1
ラベル		SEMICON I
平均	2/3	
測定開始	2010-12-01 16:45:32	
測定時間	00:01:00	
残り時間	00:00:32	
メニュー	前回データ	情報
COUNT		

Display (with Japanese status indication)

Measurement Mode	
Volume	Time
Volume	10L
Time	00:01:00
Average	3
Period Time	00:10:00
Alarm/Audio	Alarm Audio
PAGE 1/2	
BACK	MEMORY CONFIG
PRINT	

Measurement conditions settings screen

Specifications	KC-52	KC-51
Optical system	Sideway light-scattering method	
Light source	Laser diode (Wavelength 780 nm, rated output 35 mW)	
Laser product class	Class 1, IEC60825-1	
Light detector	Photodiode	
Sampling flow rate	2.83 L/min	
Size range	5 channels: $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 1.0 \mu\text{m}$, $\geq 2.0 \mu\text{m}$, $\geq 5.0 \mu\text{m}$	User selectable channels 3 channels: $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$, $\geq 5.0 \mu\text{m}$ (Default setting) 2 channels: $\geq 0.3 \mu\text{m}$, $\geq 0.5 \mu\text{m}$ 2 channels: $\geq 0.5 \mu\text{m}$, $\geq 5.0 \mu\text{m}$
Maximum particle number concentration	140 000 000 particles/m ³ (coincidence loss 10 %)	
Measurement time/ Measurement volume	Manual, any length (1 s. to 2 hours) 283 mL (6 s.), 1 L (21 s.), 2.83 L (1 min.), 10 L (3 min. 32 s.), 28.3 L (10 min.)	Manual 283 mL (6 s.), 1 L (21 s.), 2.83 L (1 min.), 10 L (3 min. 32 s.), 28.3 L (10 min.)
Count display modes	Cumulative or differential	Cumulative
Volume setting for conversion	1 L, 28.3 L, 1,000 L, None	
Number of continuous measurements	Up to 99	Up to 10
Measurement interval	Up to 24 hours (set as measuring period)	Up to 10 sec. (set as rest period)
Number of measurement conditions that can be saved	Up to 3 patterns	—
Number of times measurement results can be stored	Approx. 5 000 times (on a rotating principle, depending on the size of measurement file)	Up to 100 times (on a rotating basis)
Stored data format	Text file in tab spaced value (TSV) format	
Stored data retrieval method	Copy to SD card Copy to the connected PC via USB (KC-52 is recognized as a removable disc ^{※1})	Download to the connected PC via USB (using dedicated software)
Alarm function	Monitors the upper limit of the number of particles (when the count exceeds the predetermined level, a buzzer sound is heard), or measures the changes in the number of particles (Intervals between beeping sounds vary according to increase or decrease in the number of particles)	—
Password function	Only administrator can change the settings of measurement parameter	
Display	3.5-inch color LCD panel	3.2-inch monochrome LCD panel
Operating method	Touch panel, buttons	Buttons
Languages	English, Japanese	English
External terminal	USB Mini B (for connecting to PC or printer) Data link terminal (for connecting to the multi-point monitoring system ^{※2})	—
Environmental conditions for operation	10 °C to 40 °C, less than 85 %RH (no condensation)	
Power	AC adapter (Input voltage: 100 to 240 V AC, 50/60 Hz) Lithium-ion battery (built-in type) Battery life: 3.5 hours, Charging time: 3.5 hours	Lithium-ion battery (built-in type) Battery life: 4 hours, Charging time: 3.5 hours
Dimensions and weight	304 (H) × 87 (W) × 55 (D) mm, approx. 780 g	
Supplied Accessories	AC adapter (include power cord), USB cable (A to Mini B), Stand, Hand strap, Zero count filter, Silicon tube, Carrying case, Isokinetic probe	AC adapter (include power cord), Hand strap, Zero count filter, Silicon tube, Carrying case, TSV download software, Isokinetic probe

※1 Supported OS: Microsoft Windows 7/8.1/10 ※2 IF KC-52 has been used as continuous measurement sensor, we cannot provide the one-year warranty.

Optional Accessories	Printer DPU-S245, Thermal paper TP-34, Lint-free thermal paper TP-33, SD memory card (512 MB) MC-51SS1, RP Monitor Evo10 K1701 Ver.2/Ver.3, RP Monitor Evo10 K1701P Ver.2/Ver.3	USB cable (A to Mini B), Stand KC-52-065, Printer DPU-S245, Thermal paper TP-34, Lint-free thermal paper TP-33

For KC-52 Option

For KC-51 Supplied

RP Monitor Evo10 K1701 Ver.2/Ver.3

RP Monitor Evo10 K1701P Ver.2/Ver.3 (Conforms to 21 CFR Part11)

Operating system: Microsoft Windows 10 Pro 64 bit

Allows for the use of a computer to collect data and control measurements. Allows for alarm settings to be configured for measured values.

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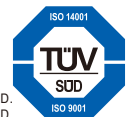
TSV Download Software

Supported OS: Microsoft Windows XP / 7 (32 bit)

Allows for data stored in KC-51 to be downloaded in TSV format to a computer.

- Downloaded data can be processed by spreadsheet applications such as Windows Excel.
- Connection cable (optional)

Date	Time	Vol	Counts	AVG	Max
2011-05-12	11:44:35	1L	/Counts	2/2 0.3	1024.0
2011-05-12	11:53:16	1L	/Counts	2/2 0.3	-----
2011-05-12	13:05:24	1L	/Counts	1/2 0.3	1199.0
2011-05-12	13:05:50	1L	/Counts	2/2 0.3	1155.0
2011-05-12	13:05:50	1L	/Counts	AVG/2 0.3	16473.0
2011-05-12	13:06:13	1L	/Counts	1/2 0.3	10067.0
2011-05-12	13:06:39	1L	/Counts	2/2 0.3	0.0
2011-05-12	13:06:39	1L	/Counts	AVG/2 0.3	10033.5
2011-05-12	14:52:03	1L	/Counts	1/2 0.3	16428.0
2011-05-12	14:52:03	1L	/Counts	2/2 0.3	-----
2011-05-12	14:52:53	1L	/ 28.3L	1/2 0.3	0.0
2011-05-12	14:52:53	1L	/ 28.3L	2/2 0.3	-----
2011-05-19	13:06:16	Man=0.24L	/ 28.3L	1/1 0.3	3216040.0
2011-05-19	13:06:32	Man=105L	/Counts	1/1 0.3	10616886.0



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* Specifications subject to change without notice.

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ISO 9001 RION CO., LTD.

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