

# SPECIFICATIONS

Particle Counter

**KE-28B**



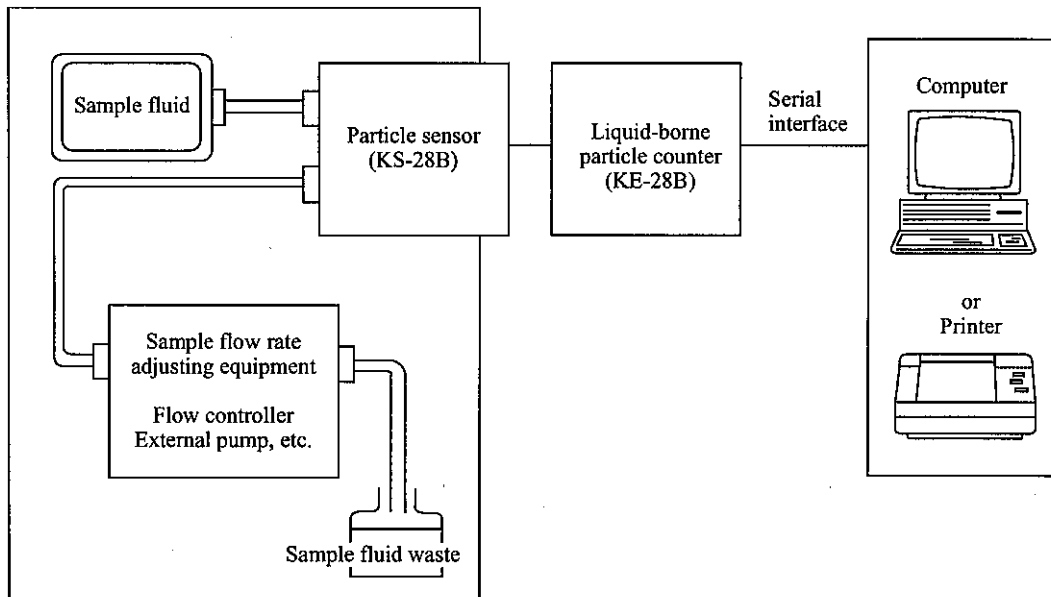
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## Outline

The KE-28B is designed to measure the concentration and size of particles in liquid, in conjunction with the Rion particle sensor KS-28B/KS-28BF. The KE-28B supplies power to the particle sensor, controls its operation, and displays measurement results. The integrated serial interface serves to control operation of the KE-28B and send measurement data to a computer or other external equipment.

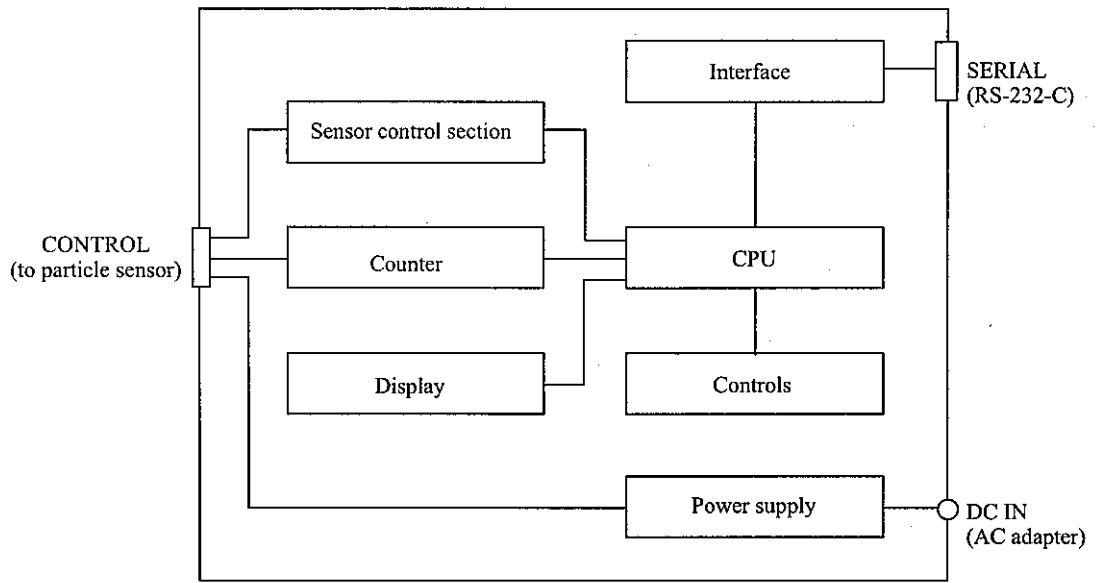
By using the multi-point interface KZ-45MG (option), a multi-point system for monitoring particle concentration can be configured.

The measurement setup is shown in the illustration below. The fluid system consists of the particle sensor and sample flow rate adjusting equipment. Which equipment is used depends on the type of particle sensor and the sample fluid supply method.



Fluid system

Measurement setup



Block diagram

# Specifications

Suitable particle sensor model:	Light-scattering type particle sensor KS-28B and KS-28BF
Particle size detection:	2-step detection (CH1, CH2) (actual particle size depending on particle sensor)
Measurement sample fluid volume:	10 mL, 100 mL, or arbitrary (MAN) Automatic measurement stop for 10 mL or 100 mL Manual measurement stop with STOP button for manual measurement
Automatic measurement:	Single or repeated 10-mL or 100-mL measurement, selectable
Single automatic measurement:	REPEAT indicator off Automatic stop after preset sample fluid volume is reached. Data are held until start of next measurement.
Repeated automatic measurement:	REPEAT indicator on Automatic restart of measurement after 10-second pause interval. During pause interval, data are held until start of next automatic measurement.
Display:	For particle count and status indication
Particle count:	Six digits (0 - 999999)
REMOTE:	Lights up in remote mode.
LASER:	Flashes when a particle sensor error has occurred.
CELL:	Flashes when a particle sensor cell error has occurred.
Connectors:	
CONTROL:	Connector for particle sensor unit
SERIAL:	Interface connector for serial interface
DC 12V:	For supplied AC adapter

RS-232-C interface

Flow control:	none
Transfer principle:	asynchronous, full-duplex
Transfer rate:	4800 bps
Data word length:	7 bit
Stop bits:	2
Parity:	even
Xon/Xoff control:	none
Delimiter:	<CR><LF>
Character code:	ASCII

Ambient conditions for operation: 0 to 40°C, RH less than 85% (no condensation)

Ambient conditions for storage: -10 to +50°C, RH less than 85% (no condensation)

Power requirements: 12 V DC (from supplied AC adapter)  
AC adapter can be used from 100 V to 240 V.

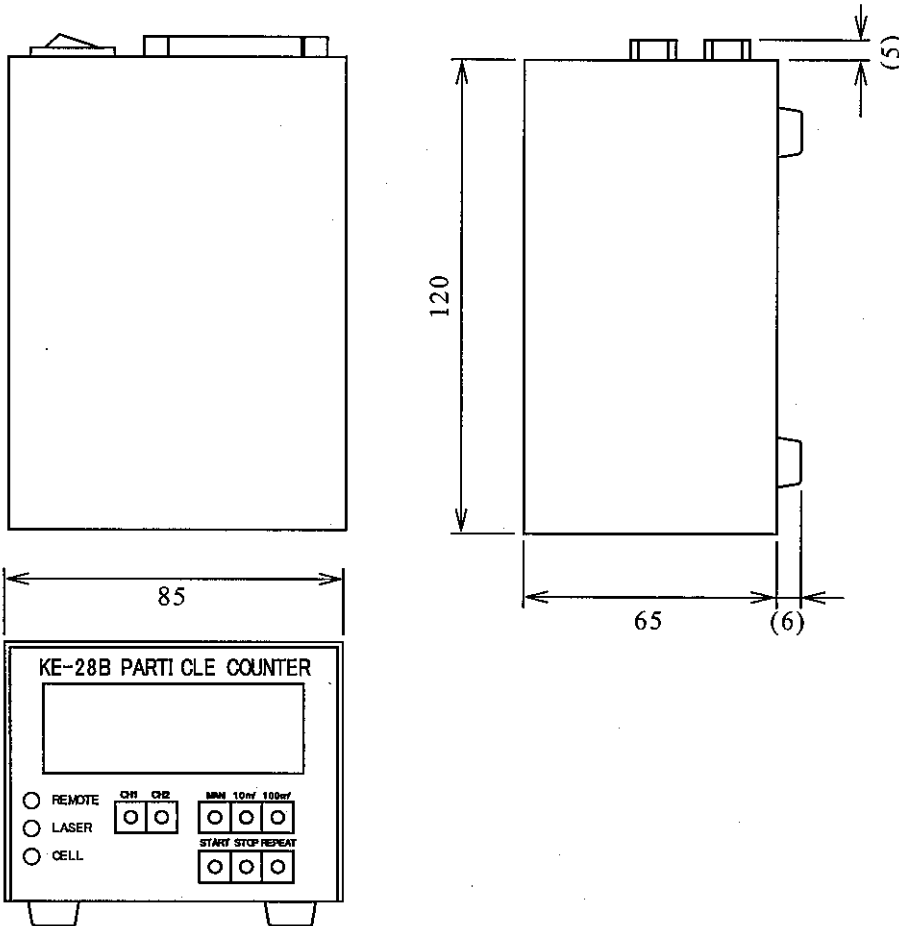
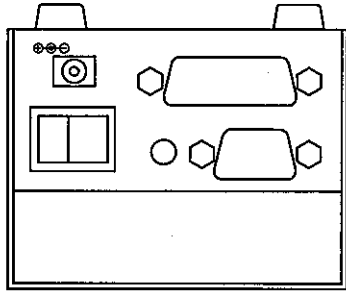
Power consumption: 100 V AC, 23 VA  
(including liquid-borne particle sensor KS-28B and supplied AC adapter)

Dimensions: 85 (W) × 65 (H) × 120 (D) mm  
(without protruding parts)

Weight: Approx. 400 g

Supplied Accessories

AC adapter	1
Power cable (used for 125 V and less)	1
Instruction manual	1
Inspection certificate	1



Dimensional Drawing

Unit: mm