

# **SPECIFICATIONS**

**SYRINGE SAMPLER (25 mL syringe version)**

**KZ-30W2**



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# Outline

The syringe sampler KZ-30W2 serves to supply a controlled amount of sample fluid for measurement by a liquid-borne particle counter such as the Rion KL-11 or KL-11A. The amount of fluid depends on the measurement conditions.

## Main Functions and Features

- Choice of three operation modes: purge mode, measurement mode, and combination mode for a preset sequence of purge and measurement operations.
- Memory for up to 50 sets of parameter settings for purge mode or measurement mode.
- In measurement mode, selectable blank volume lets sample fluid flow rate stabilize after start of plunger action.
- Syringe set with integrated valve for easy replacement.
- Automatic syringe capacity detection.
- When the KZ-30W2 is used together with the KL-11 or KL-11A, changing a setting that is common to both units (sample flow draw rate, blank volume, number of measurement cycles in measurement mode) at one unit will automatically cause a change at the other unit as well, so that the setup of both units is matched.

It is also possible to use the START key on the KZ-30W2 to initiate measurement with the KL-11 or KL-11A.

\* All company names and product names mentioned in this specifications are trademarks or registered trademarks of their respective owners.

# Specifications

The following models can be connected:

- KL-11, KL-11A
- KL-20A, KL-22, KL-26, KL-27 (with some limits regarding usable functions)
- KE-40 (with some limits regarding usable functions)
- KE-40B1 and others

In each case, an optional connection cable that fits the particular model is required.

Suitable syringe sizes    25 mL PP syringe (standard)  
                                  25 mL Pylex glass syringe (option)  
                                  10 mL Pylex glass syringe (option)

Materials of parts exposed to sample fluid  
PTFE, PCTFE,  
Polypropylene or Pylex glass (depend on used syringe)

Allowable sample type	Fluids which do not cause corrosion of fluid-contacting parts
Operation stroke	
Full stroke	66 mm
Tolerance	60 mm±2%
Repeat precision	0.5% or less
Resolution	0.6 mm
Operation modes	
Purge mode	For purging of sample fluid system
Measurement mode	For measurement
Combination mode	For purge/measurement sequences
Purge mode	
Flow rate	
Setting range	10 to 100 mL/min (with 25 mL syringe) 5 to 50 mL/min (with 10 mL syringe)
Resolution	1 mL/min
Purge volume	
Setting range	0 to syringe capacity
Resolution	1/100 of syringe capacity
Repeat setting	1 to 99
Measurement mode	
Flow rate (draw and drain)	
Setting range	10 to 100 mL/min (with 25 mL syringe) 5 to 50 mL/min (with 10 mL syringe)
Resolution	1 mL/min
Measurement volume	
Setting range	0 to syringe capacity
Resolution	1/100 of syringe capacity
Blank volume	
Setting range	0 to 1/2.5 of syringe capacity (Measurement volume + Blank volume ≤ 1.1 × syringe capacity)
Resolution	1/100 of syringe capacity
Repeat setting	1 to 99
Combination mode	
Number of steps	1 to 10
Number of memory addresses	
	50 (with battery backup)
Combination mode memory	
	1 (with battery backup)

External connectors      EXTERNAL CONTROL 1, 2

Display                      20-digit × 4-line LCD

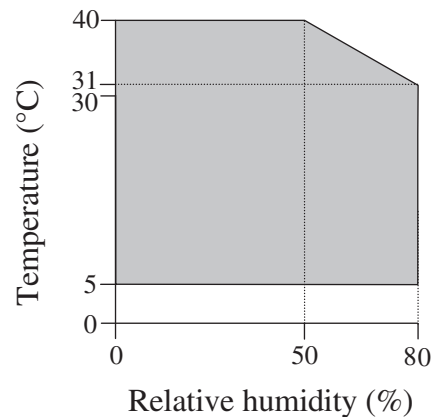
Environmental Requirements

Operation Environment

Indoor Use Only

Environmental Conditions for Operation

Shaded section  in the following graph (no condensation)



Maximum relative humidity 80% for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C

Sample Fluid Temperature Range

5°C to 40°C

Environmental Conditions for Storage

-10°C to +50°C, less than 85% RH (no condensation of internal fluid)

Altitude:                      Up to 2000 m

Supply Voltage Fluctuations

100 to 240 V AC±10%

Overvoltage Category II

Pollution Degree          2

Power                          100 to 240 V AC, 50/60 Hz, 100 VA or less

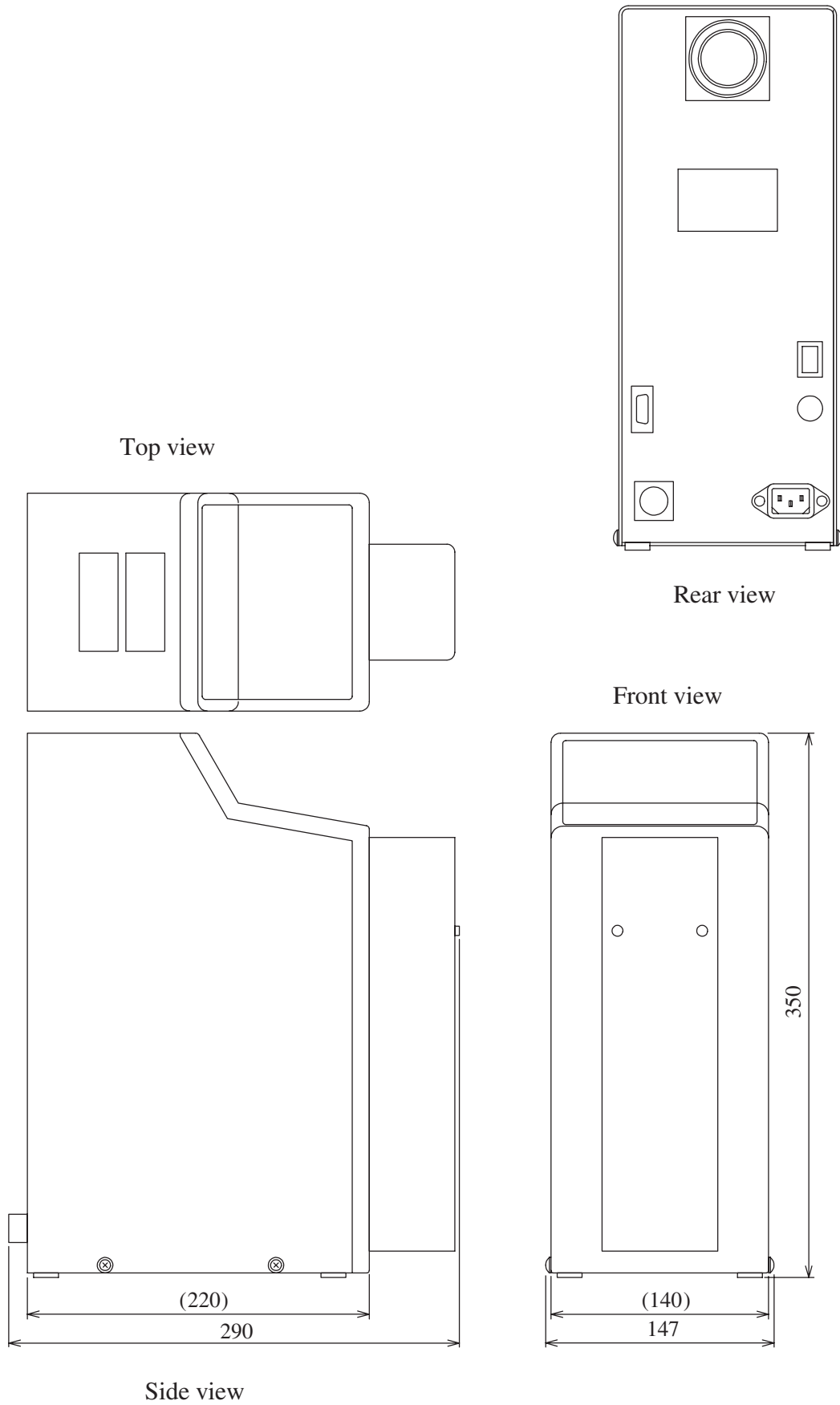
Fuse                              LITTELFUSE LTD., UK model 215 3.15  
time-lag type, 3.15 A

Back-up Battery              maxell    SUPER Lithium (model ER17-33)

Dimensions                    350 (H) × 147 (W) × 290 (D) mm (Max.)  
350 (H) × 140 (W) × 220 (D) mm (Without protruding parts)

Weight                          Approx. 6 kg

Supplied accessories	Sampling tube set (with connectors)	2
	25-mL PP syringe set (for exchange)	1
	Power cord	1
	Fuse (250 V, T3.15 A, for exchange)	1
	Packing for connector (mounted in valve section)	2
	Accessory box (for protection when packed)	1
	Display cover (for protection when packed)	1
	Instructional manual	1
	Liquid-borne particle counter usage precautions	1
	Inspection certificate	1
	Document for China RoHS	1
Options	Connection cable C (KZ30S180)	1



Dimensional Drawings

Unit: mm

Specifications subject to change without notice