

Sampling Pump

MINI PUMP MP-ΣNI Series

MINIPUMP MP-Σ30NI

MINIPUMP MP-Σ300NI

MINIPUMP MP-Σ500NI

MINIPUMP MP-Σ100HNI

Maximum Flow Rate

MP-Σ30NI	0.5L/min
MP-Σ300NI	3L/min
MP-Σ500NI	5L/min
MP-Σ100HNI	1.5L/min (High Load Type)



Incorporates a constant flow rate function to minimize drops.
Displaying instantaneous and integrated flow volume as digital values.
Four timer sampling modes (manual, down, volume, cycle timer).
The LCD display for checking in dark locations.
The state of the filter element can be visually checked.
Incorporates a measurement data log function.
Three power sources are supported.

Battery Unit(LI-10N)

This is the exclusive lithium-ion rechargeable battery and can operate for a long time.
Less self discharge (natural discharge)



Charging Connector

The LI-10N can be charged with the Quick charger QC-10N.

Suction Port

5mm and 7mm dia. tube can be inserted



Power Switch

Exhaust Port

5mm and 7mm dia. tube can be inserted

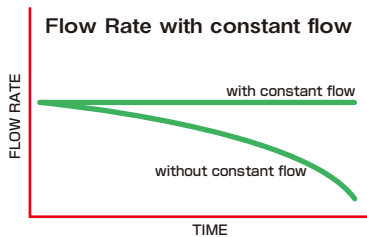
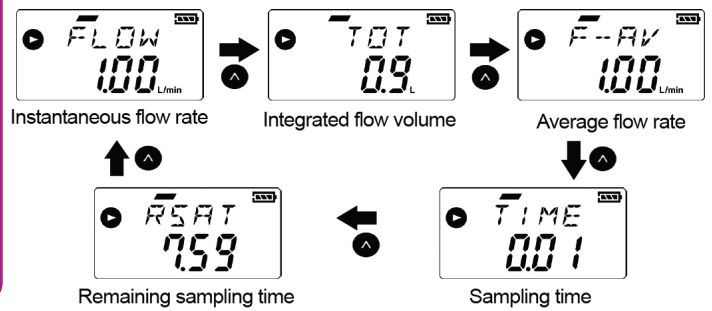
Operation Panel

Operation Panel

Designed to operate by one hand



Display of measurement result (Ex: Downtimer Mode)



Pattern 1



Quick charger

Model	QC-10N
Item Code	080860-110

*Can be used as AC adapter



Lithium-ion rechargeable battery unit

Model	LI-10N
Item Code	080860-010

Pattern 2



Dry cell battery unit

Model	DB-10N
Item Code	080860-011

*For alkaline AA dry cells (LR6)

Options



Communications software with USB cable

Item Code	090860-0045
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Impinger holder

Item Code	080840-52
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*Impinger is sold separately

Spare Parts



Low flow rate suction holder

Item Code	080860-002
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Filter element

Q'ty/pack	VFE-3
Item Code	5
	080860-001

ΣII Main Unit



CODE:
090860-034 ··· MP-Σ30NII
090860-304 ··· MP-Σ300NII
090860-504 ··· MP-Σ500NII
090860-104 ··· MP-Σ100HNII

Pattern 3



AC adapter

Item Code	080000-1203
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Filter Check Window

It shows the state of the filter element.

USB Connector

For Communications software. (sold separately)



Power Source Connector

Connection for the Quick charger QC-10N.



Tripod Mounting Hole



Hole for Hook

For Optional usage : Impinger Holder, Filter Holder.

Slide Lock

For removing the battery.

Quick Sampling Guide

① **Manual Mode Operation**...Sampling manually



To start



To stop

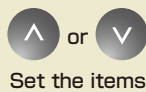
② **Down Timer Mode Operation**...Preset to start sampling.



MODE



Set 'Mode select bar' to 'DT'



Set the items



Enter the each setting



Start pump operation

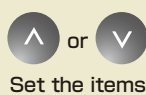
③ **Volume Timer Mode**...Preset to start sampling and to end sampling when the preset integrated flow volume is reached.



MODE



Set 'Mode select bar' to 'VT'



Set the items



Enter the each setting



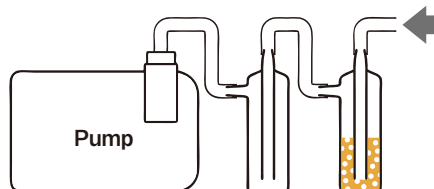
Start pump operation

④ **Cycle Timer Mode Operations**...Operate automatically in accordance with the setup details preset on the PC.

Communication software is sold separately and your PC is required.
Ask SIBATA's agents for details.

When Using an Impinger

Install piping on the pump as shown below to prevent liquid from being sucked directly. We also recommend setting up a multi-stage trap on the pump suction side.



Specifications

Model	MP-Σ30NII	MP-Σ300NII	MP-Σ500NII	MP-Σ100HNII
Operable Flow Rate Range	0.050~0.500L/min.	0.50~3.00L/min.	2.00~5.00L/min.	0.30~1.50L/min.
Display Range of Instantaneous Flow Rate	0.000~0.750L/min.	0.20~4.50L/min.	0.50~6.00L/min.	0.10~2.50L/min.
Constant Flow Rate Range	0.1L/min.:0~10.0kPa 0.2L/min.:0~9.0kPa 0.3L/min.:0~9.0kPa 0.4L/min.:0~8.0kPa 0.5L/min.:0~7.0kPa	0.5L/min.:0~10.0kPa 1.0L/min.:0~7.0kPa 2.0L/min.:0~6.0kPa 3.0L/min.:0~5.0kPa	2.0L/min.:0~10.0kPa 3.0L/min.:0~8.0kPa 4.0L/min.:0~5.0kPa 5.0L/min.:0~3.0kPa	0.3L/min.:6~35kPa 0.5L/min.:5~30kPa 0.7L/min.:4~25kPa 1.0L/min.:3~22kPa 1.5L/min.:3~10kPa
Accuracy of Constant Flow Rate	Within ±5% of the set flow rate			
Setting Range of Integrated Flow Rate	0.00~999.99L	0.0~9999.9L		
Display Range of Integrated Flow Rate	0.00~9999.9L	0.0~9999.9L		
Display Range of Set Time	0.00 to 999.59 (hour, minute)			
Time Setting/Display	Year/month/day, hour, minute			
Built-in Flow Meter	Mass-flow sensor			
Pump Type	Double diaphragm type			
Material	Pump head:ABS-POM-TPU, Diaphragm:EPDM, Valve: EPDM, Case:PC			
Mode	Manual, Down timer, Volume timer, Cycle timer			
Display	Liquid crystal display device(with backlighting)			
Communications (USB)	Loading and setting by exclusive communications software			
Suction/Exhaust Port Diameter	Outside Dia. 6mm and 8mm (tube used: Inside Dia. 5mm and 7mm)			
Operating Temperature/Humidity	0 to 40°C, 10 to 90%RH(no condensation)			
Electric Power Source	Lithium-ion rechargeable battery(option), AA dry cell batteries, (need Dry cell battery unit)(option), AC adapter(option)			
Operating Time (When a lithium-ion rechargeable battery is used without load)	60 hours or more	1.0L/min.:Over 50 hours 2.0L/min.:Over 45 hours 3.0L/min.:Over 35 hours	2.0L/min.:Over 36 hours 3.0L/min.:Over 30 hours 4.0L/min.:Over 24 hours 5.0L/min.:Over 18 hours	1.0L/min. : 48 hours (at 3.0kPa) or more
Operating Time (When AA alkaline dry cells are used without load)	30 hours or more	1.0L/min.:Over 25 hours 2.0L/min.:Over 22 hours 3.0L/min.:Over 17 hours	2.0L/min.:Over 18 hours 3.0L/min.:Over 15 hours 4.0L/min.:Over 12 hours 5.0L/min.:Over 9 hours	1.0L/min. : 24 hours (at 3.0kPa) or more
Dimensions	105(W)x67(D)x95(H)mm (including lithium-ion rechargeable battery)			
Weight	Approx.0.33kg(Approx.0.65kg including lithium-ion rechargeable battery)			
Accessories	Suction holder for ultra low flow volume(for MP-Σ30NII only)			
Item Code	090860-034	090860-304	090860-504	090860-104

*No gurantt of accuracy for 0.05 - 0.1L/min in Σ30KNII

*The cycle timer mode can be set only by a PC, and Communications software(sold separately) is also required.

In the cycle timer mode, the sampling start setting involves only setting of the time.

*The operation hour is the case for no load, 25°C. The life of the battery varies depending on the ambient temperature at the operating time.

Minipump Line Up

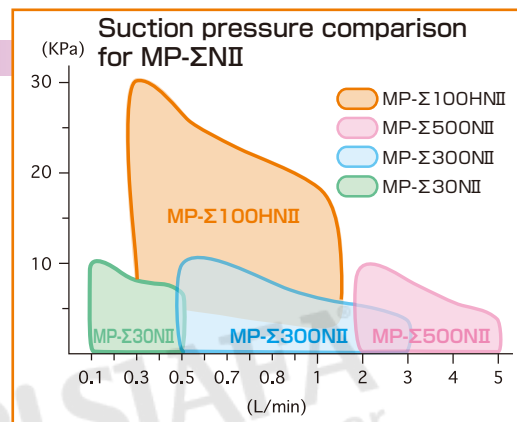
Stand Sampler



This device collects harmful particulate and liquid and / or gaseous substance found in the work environment.

Specifications

Code no./Model	080140-053/S-603
Liquid collector	Midget impinger, G-1
Suction pump	Mini Pump MP-Σ300NII
Flow rate	0.5 to 3.00L/min.
Tripod	Max. height 110cm
Dimensions	Pump: 145 x 67 x 95mm
Weight	Pump: 0.65kg Mini pump x 1 Midget impinger x 2 Impinger holder x 1
Accessories	Tripod x 1 Quick charger x 1 Tube, 30cm x 2



Standard Flowmeter

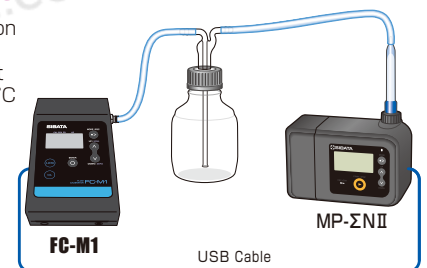


Standard dry flowmeters for calibration of sampling pumps

- Dry flowmeters based on differential pressure sensors facilitating operation and maintenance
- Transportable to measurement sites as they are compact and lightweight
- Equipped with automatic flow rate correction functions (0°C at 1 atm, 20°C at 1 atm, 25°C at 1 atm and actual flow volume)
- Capable of issuing traceability certificates
- Measuring ranges: 0.05 to 5 L/min.

Specifications

Code No.	080120-151
Measurement Range	0.05 to 5 l/min.
Instantaneous Flow Rate Display Range	0 to 6 l/min.
Flow Rate Precision	+/-3% of the standard flow rate or +/- 3 ml (whichever is larger)
Power Source	Four AA batteries (operating time: at least 8 hours)



Specifications, and appearance described in this document are based on information as of January, 2016. They are subject to change without notice for improvement of the product.