

LATS-1

Particle size and turbidity can be measured simultaneously.

For example, the presence of pathogenic microbes such as cryptosporidium in water can be monitored in terms of the two indicators of turbidity and particle size.

Particle size distribution can be measured even if the concentration of the substance being measured is extremely low.

Conventionally, the optimal concentration for the measurement of particle size distribution employing the laser diffraction method has been approximately 100 ppm. With the LATS-1, however, an extremely high sensitivity of approximately 100 times that of the SALD series has been achieved, enabling the measurement of particle size distribution even at 0.1 to 1 ppm levels. The particle size distribution of substances which previously could not be measured can now be easily measured using this instrument. It is thus anticipated that new applications will emerge in a variety of fields.



A flat measurement sensitivity over the entire measuring range (0.5 to 50mm).

A stable and flat measurement sensitivity over the entire range of measurement has been realized by employing the laser diffraction method as the measurement principle.

Can be used for both real time monitoring and batch measurement.

Capable of measuring still water, it can also be used for batch measurement in addition to its application as a real time monitor.

Maintaining a constant flow rate of water for monitoring is not necessary.

Though it is necessary to maintain a constant flow rate of water when operating particle counters or high sensitivity turbidimeters based on such counters, with the LATS-1 there is no need whatsoever to control or measure the water flow rate.

Calibration is not required for particle size distribution (particle size and normalized particle amount) measurement.

Because measurement is based on the laser diffraction method there is no need for calibration when measuring particle size distribution (particle size and normalized particle amount), which means that particle sizes can be determined accurately. However, when turbidity or the absolute number of particles within a specific volume needs to be ascertained, calibration with the relevant standards is necessary.

Particle size distribution can be measured in approximately 1 second.

The measurement interval can be set freely. At its quickest the instrument can measure turbidity and particle size in approximately 1 second. Hence instantaneous variations can be detected reliably.

Equipped with a multitude of data processing functions.

A variety of data processing functions such as 3-dimensional graph, overlay graph of particle size distribution results, real time monitoring and time series analysis is equipped as standard.

Specifications LATS-1

Turbidity	Measuring Range	0 to 3.2NTU (resolution 0.001 NTU)
	Turbidity Standard	Hormazin
Particle size distribution	Measuring Range	0.5 to 50µm
	Measurement Principle	Laser diffraction method
Measurement cell	Internal Dimensions	Approx.100 mm square
	Optical Path	Approx.40 mm
Quantity of water required during real time monitoring		50 to 3000 cm ³ /minute
Power requirements		100~120,200~240VAC 100VA,50/60Hz
Size,Weight		480mm(W) X 317mm(D) X 474mm(H),approx. 20kg

PC System Requirements

CPU	Pentium 100MHz or faster
Memory	32 megabytes or more
OS	Windows 95/98/Me/NT4.0/2000
Display	SVGA 800X800 or better
Printer	One that is compatible with Windows 95/98/Me/NT4.0/2000
Hard disk capacity	Over 20 megabytes of free hard disk space required
CD-ROM Drive	Required when installing software
Serial Port(RS-3232C)	1 port