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## LPC-6CE Intelligent Liquid Particle Counter

### LPC-6CE



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### ■ Product Description

The LPC-6CE is a high-precision liquid particle counter designed for accurate measurement of particle size and quantity in various types of injectable solutions, sterile powders, and pharmaceutical packaging materials. It features an advanced laser light source and compensation circuitry to ensure precise testing across both colorless and colored liquids, including non-electrolyte and high-viscosity samples. The system includes an imported high-pressure injection pump with adjustable volume settings, ensuring consistent performance regardless of altitude or environmental conditions. Key components in contact with liquids are made from imported 316L stainless steel and PTFE, allowing direct testing of organic solvents and oil-based substances. With a user-friendly touch screen interface, multiple testing modes, large data storage capacity, and comprehensive connectivity options, the LPC-6CE provides a reliable and flexible solution for liquid particle analysis in pharmaceutical and industrial applications.

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## ■ Features

- Meet the 2020 edition of the "Chinese Pharmacopoeia" and can directly detect the size and number of insoluble particles of injections, sterile powders and drug packaging materials (YBB00272004-2015).
- Adopt high-performance imported laser light sources and compensation circuits to ensure the test accuracy of various colorless and colored samples, and can directly detect electrolyte-free samples.
- Adopt imported high-pressure injection pump sampling system, which can set the injection volume according to the sample variety tested, with high injection accuracy, meeting the detection requirements of high-viscosity samples, and is not affected by factors such as geographical location, meeting the use requirements of different altitudes.
- The injection slit and pipeline are made of imported 316L and imported PTFE materials, which can directly detect special solutions such as organic solvents and oil matrices.
- According to the demand of injection volume, different high-pressure injection systems can be replaced.
- It has a large infusion test according to the pharmacopoeia standard, and the sampling volume and test times can be set arbitrarily.
- It has a drug packaging material test, and the sampling volume, judgment specifications and test times can be set arbitrarily.
- It has a special test program for small-volume injection (small injection), which can be injected according to the specifications of the small injection, and automatically converted to the size and number of container particles after the test is completed, which meets the requirements of the "Chinese Pharmacopoeia" and international general requirements.
- It has a custom mode, and can select channels for testing in the particle size range of the entire channel, and can set greater than or equal to values and interval values.
- Color touch large screen operation: English interface switching, simple and fast operation, powerful functions. Can display multi-channel test data at the same time.
- It has sample name input and automatic storage, the number of sample names is up to 1000 (expandable), and the operation is convenient and fast.
- Data storage up to 1,000,000 records, search, query and print through (sample name, sample batch number, test time, test account).
- Equipped with a dot matrix printer to meet the long-term data storage.
- Equipped with host computer software, RS232 serial port data transmission, USB data copy.
- Can be connected to LIMS and other software management platforms, dedicated data analysis software for data storage and statistics.
- With three-level password management authority.
- A single machine has 128 operators to manage (expandable).
- Can provide stand-alone version of 3Q certification documents and information.

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## ■ Functional parameters

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Model	LPC-6CE
Test range	1~500 $\mu$ m
Full channel settings	$\geq 5\mu$ m, $\geq 8\mu$ m, $\geq 10\mu$ m, $\geq 12\mu$ m, $\geq 25\mu$ m, $\geq 100\mu$ m (channels can be customized according to user requirements)
Pharmacopoeia standards	$\geq 10\mu$ m, $\geq 25\mu$ m,
Drug packaging material channel	$\geq 5\mu$ m, $\geq 10\mu$ m, $\geq 25\mu$ m,
Injection volume	$\geq 0.1$ ml or more any volume
Counting range	0~9999999 particles
Detection particle concentration	0~10000 particles/ml
Relative standard deviation	RSD $\leq 2\%$ (standard particles $\geq 1000$ particles/ml)
Channel resolution	$\geq 95\%$ ( $\geq 10\mu$ m channel)
Sampling time	5ml (<10seconds) 100ml (<3minutes)
Accuracy	Within $\pm 5\%$ of the specified value
Stirring speed	0~2000rpm
Working temperature	0~40 $^{\circ}$ C
Working voltage	AC220V $\pm 10\%$ ; 50Hz $\leq 90$ W
Instrument size	420*350*470(mm)

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## ■ Applications

The intelligent particle detector is designed for the pharmaceutical, medical device and packaging material industries. It is suitable for particle contamination detection of injections, sterile powders, small-volume injections and other drugs, filtration rate verification of infusion equipment (such as anesthesia bags, precision filters), and compliance testing of drug packaging materials (glass bottles, rubber stoppers). It also meets the high-precision data requirements of laboratory research and development, GMP production quality control and third-party testing agencies, and comprehensively protects drug safety and quality.

