

PC550 On-line Particle Counter (High-End Type)



PRODUCT INTRODUCTION

Detect the size and quantity of solid particles in liquids using the light blockage (light extinction) principle. It is suitable for solid particle contamination degree detection in hydraulic oil, lubricating oil, shale oil, transformer oil (insulating oil), turbine oil (turbine lubricating oil), gear oil, engine oil, aviation kerosene, water-based hydraulic oil, and other oils. It can also detect insoluble particles in organic liquids and polymer solutions.

APPLICATION FIELD



Military Field



Aerospace Field



Power Industry



Transportation Industry

THE PERFORMANCE CHARACTERISTICS OF

- Light Blockage (Light Extinction) Principle.
- Used for on-site online detection, enabling real-time monitoring of particle contamination in hydraulic and lubrication systems.
- Continuous automatic online detection with adjustable detection intervals.
- Calibration, detection methods, and accuracy meet ISO 4402, GB/T 18854, and ISO 11171 standards.
- Built-in particle contamination degree rating standards, with the ability to add custom standards as needed: NAS1638, ISO4406-1999, ISO4406-2007, ISO4406-1987, GB/T 14039-2002, GJB420B-2006, GJB420B-2015, GJB420A-1996, AS4059E, AS4059F, ROCT17216-1971, ROCT17216-2001, JTS-005, SAE749D-1963, AETF1A, NAS1638/ISO4406, etc.
- Equipped with a high-performance large-size particle counting sensor.
- 7-inch industrial computer display with an Android system for instrument control and calculations.
- Optional calibration curves: ACFTD, ISOMTD, latex spheres, GOST, etc.
- Test result storage options include built-in printer printing, software database storage, and USB storage.
- Optional water content sensor.
- RS485 or RS232 communication interface, which can transmit data externally.

TECHNICAL SPECIFICATIONS

Project	Data
Light Source	Semiconductor laser
Detection Mode	Online or offline
Online Monitoring Interval	1 second to 24 hours
Online Detection Pressure	0.1 to 0.6 MPa (up to 40 MPa with optional pressure reduction device)
Detection Sample Temperature	0°C~80°C
Particle Size Range	1μm~500μm
Sensitivity	1 μm (ISO 4402) or 4 μm (c) (GB/T 18854, ISO 11171)
Detection Channels	32, with adjustable particle size settings at 0.1 μm intervals
Sampling Volume	10~100ml
Sampling Volume Relative Error	Better than ±3%
Detection Speed	5~60mL/min (default 25mL/min)
Cleaning Speed	5~60mL/min
Resolution	Better than 10%
Coincidence Error Limit	12000~40000 particles /mL
Particle Counting Repeatability	RSD<2%
Particle Counting Relative Error	±10%
Operating Temperature	-20°C~60°C
Storage Temperature	-30°C~80°C
Power Supply	110 to 240 VAC or 24 VDC