



HIAC PODS+

PORTABLE LIQUID PARTICLE COUNTER



CHARACTERIZED
by ingenuity.





HIAC PODS+

PORTABLE LIQUID PARTICLE COUNTER

Maximize production uptime

Extend the life of your equipment with liquid particle counting analysis

Identify equipment problems before costly breakdowns occur

Fast liquid contamination analysis in under 60 seconds

One-button sampling for all global reporting cleanliness standards

Features

- Self-diagnostic Alerts
- Paperless Workflow
- Moisture Detector
- Digital Exports
- Bubble Optimizer
- Bottle Sampling
- Sample Recipe Wizard
- Online Sampling
- Cleaning Routines
- 6-Hour Battery

Benefits

- Save time with custom sample recipes and <60 sec. sample test runs
- Easily move from one sample point to another
- 1-Button sampling, no training or instrument expertise required
- Onsite instant reports that eliminate lab wait times and lab fees
- Multi-liquid sampling capability (fuels, petroleums, water & glycols)
- Ability to report out to multiple standards from the same sample
- Detects moisture in petroleum based fluids

Calibrations:

ISO-MTD, ACFTD, ISO-11171, PSL, Glycol

Reporting Standards:

ISO, SAE, NAS, ASTM, GOST, DEF STAN, NAVAIR, User Defined



In-Depth Features



Moisture Detector

Extend system uptime by reducing oxidation in your system. Detect moisture before degradation sets in.



Bubble Optimizer

Get the right particle counts with an internal airtight pressurizing chamber that compresses bubbles so they are not mistaken for particles.



Sample Recipe Wizard

Speed up sample times. Easily navigate through the setup wizard to create custom test recipes that can be used over and over again.



Cleaning Routines

Speed up sample-to-sample times with intelligent self cleaning routines that remove unwanted particles.



Self-Diagnostic Alerts

Continuous self-diagnostic system that instantly notifies the operator of sensor contamination, sensor blockage and need for service.



Paperless Workflow

Save operator time with built in data storage. Samples and reports are instantly backed up and can be exported to a computer and/or LIMS.



Bottle Sampling

This 100% portable instrument allows test operators to analyze liquid contamination wherever the system is located.



Online Sampling

Connect the PODS+ to an operating online system that instantly communicates system cleanliness.



6 Hour Battery

Test more samples on one charge with our Military grade lithium battery.

Liquid Compatibility

Monsanto Skydrol™ version Akso Fyrquel™	Ethers	MIL-H-5606
Marston Bentley HW 540 Monsanto Coolanol™	Alcohols	MIL-H-83282
Jet Fuel (JP4, JP5) Monsanto Coolanol™	Aldehydes Ketones	Shell Tellis™
Jet Fuel (JP4, JP5) Kerosene	Esters	Diesel Fuel
Mobile Zerol™ 150	AromaWcs	Mineral Oil
Stoddard Solvent	Water	



Specifications



Number of Channels	9
Size Channel	ISO-MTD: 4, 6, 10, 14, 21, 25, 30, 50, and 70 μm ACFTD: 5, 10, 15, 20, 25, 30, 40, 50, and 100 μm
Flow Rate	15, 30 and 50 mL/min fixed flow rates
Light Source	Class 3B laser, 775 to 810 nm, 5 mW maximum
Calibration Types Available	<ul style="list-style-type: none"> • ISO-MTD in 5606 • ISO-MTD in 5606 with ISO-11171:2010 • ISO-MTD in Glycol • PSL Spheres in Water • ACFTD in 5606
Counting Efficiency	JIS B9925: 1997
Coincidence Loss Error	5% coincidence loss at 40,000 particles/mL (per ISO-11171:2010)
Sample Volume	5 mL to 50 mL programmable
Fluid Temp Range	0° C and 90° C (32° F to 194° F) when ambient temperature is 25° C (77° F)
Viscosity Range	<ul style="list-style-type: none"> • 1 to 425 cSt with shop air pressure at 100 psig • 1 to 150 cSt with internal pump
Wetted Materials	Stainless steel, chrome plated brass and stainless steel, sapphire, PEEK, PTFE, FFKM and LDPE PODS+ Moisture Sensor
Reporting Standards	<ul style="list-style-type: none"> • ISO 4406: 1999 • NAS 1638 (translated from ISO-MTD calibration when no ACFTD calibration is available) • SAE AS4059 • NAVAIR 01-1A-17 (translated from ISO-MTD calibration when no ACFTD calibration is available) • DEFSTAN 91-91 • GOST 17216-2001 • ASTM D7619-12 • User-specified • Counts/mL • Raw counts
Data Storage	3,000 records
Dimensions (D x W x H)	20.3 x 32.0 x 42.5 cm (8.0 x 12.62 x 16.75 in)
Weight	PODS+: 9.2 kg (20.1 lb) PODS+ with moisture sensor: 9.6 kg (21.0 lb)
Input/Output	<ul style="list-style-type: none"> • Input: Ethernet 10/100M-Bit, client and host USB ports (USB 2.0), RS232 and I/O port for pump control and alarms • Output: pdf, tsv over USB, custom modbus protocol over Ethernet and RS232
Bottle Operation	<ul style="list-style-type: none"> • Sample Delivery Method: Pneumatically pressurized sample chamber • Internal Air Source: Internal compressor up to 40 psig (for up to 150 cSt viscosity liquids) • External Air Source: Clean Dry Air (CDA) source up to 110 psig (required for fluids with viscosity above 150 cSt viscosity) • Tare Volume: 5 mL to 50 mL in 1 mL increments
Online Operation	<ul style="list-style-type: none"> • Sample Delivery Method: Online pressure adaptor • Fluid Pressure: 40 to 5000 psig • Tare Volume: 5 mL to 999 mL in 1 mL increments • Number of Samples: 0 to 500 programmable with 0 being continuous • Filter Mode: Run until dirty or clean contamination level is reached with alarm triggers
Power	<ul style="list-style-type: none"> • Rechargeable Battery: Lithium-ion • Operating Time: 6 hours of continuous sampling on a 3 minute interval, including printing with each sample and running 50 mL samples at 50 mL/min, 100 mL/min drain and with 5606 • Recharge Time: 4 hours • DC Input: 24 VDC, 2.5 A maximum • AC Adaptor: Universal 100-240 VAC, 50-60 Hz, 90 W
Environment	<ul style="list-style-type: none"> • Operating Temperature Range: 0° C to 50° C ambient temperature Operation on the external power supply (charging the battery) limited to 40° C • Storage Temperature Range: -40° C to +70° C ambient temperature • Relative Humidity: 20% to 95%, non-condensing • Max Altitude: 3000 m (9842 ft)



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