



PAMAS S4031 **Portable particle counting instrument for liquids**

Particle counter for the remote on-site analysis of fluid samples including the following fluids, depending on the version:

- Water
- Suspensions
- Cleaning fluids
- Sea and brackish water
- Korrosive fluids
- Hydraulic Oil
- Turbine and insulation oils
- Gear and motor oils
- Phosphate ester based hydraulic fluids
- Water based hydraulic fluids



PAMAS S4031

Portable particle counting instrument for liquids



Product features

- Robust & convenient design
- Lightweight only 8 kg
- Customizable measurement analysis settings
- Intuitive operation via touch screen
- Automatic sample flow and volume control by wear resistant ceramic piston pump
- 32 freely adjustable size channels
- Measurement from pressureless up to 6 bar/420 bar system pressure, depending on the version
- Use of any sample vessel
- Internal data storage of more than 4,000 measurements
- Display of actual and saved measurement results and printed via integrated thermo printer
- Same measurement accuracy as a laboratory unit
- Multilingual menu navigation
- Battery running time of more than 4 hours

Accurate single particle counting technique

The volumetric sensor cell and sophisticated optical components guarantee high resolution and accuracy. Every particle passing through the sensor is detected. This design ensures the true measurement of even ultra clean fluids.

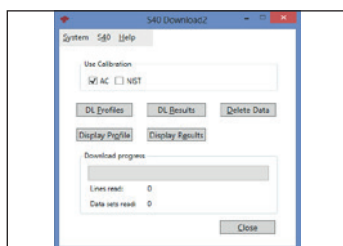
Calibration

The system is calibrated according to the international standard ISO 21501-3 or ISO 11171. These calibrations are traceable to NIST standards. Historical calibrations including ISO 4402 are still available on request.

Software

PAMAS Download

The PAMAS S4031 comprises of the software tool PAMAS Download. Transfer of the measurement results from the instrument is via a USB cable connected to a PC/laptop. The results can then be further processed, e.g. using Microsoft Excel®.



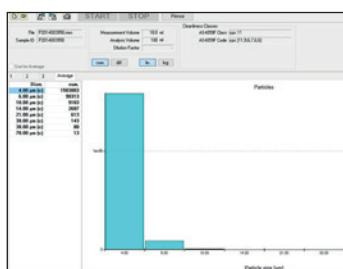
Software PAMAS Download

Software

PAMAS PMA

Using the optional Software PAMAS PMA, the portable PAMAS S4031 can be used via a PC like a laboratory unit.

- User-friendly setting of the measurement parameters
- Report and analysis of measuring data
- Measurement report including cleanliness codes and sample parameters in numerical and graphical presentation
- LIMS integration possible



Software PAMAS PMA

Reporting of measurement results

according to the following standards, depending on the calibration: ISO 4406, SAE AS4059, NAS 1638, GOST 7216, GJB 420B, NAVAIR 01-1A-17, CHARN, as well as raw data. When using the software PAMAS PMA, the measurement results can additionally be reported according to GJB 420A, SAE 49D, and ISO 11218.2.

Versions

- **PAMAS S4031 Standard** for aqueous liquids
- **PAMAS S4031 Seawater** for Saline and brackish water
- **PAMAS S4031 CL** for corrosive liquids
- **PAMAS S4031 Oil** at up to 420 bar system pressure
- **PAMAS S4031 Lube Oil** for highly viscous oil up to 1,000 cSt
- **PAMAS S4031 Skydrol** for phosphate ester based hydraulic fluids
- **PAMAS S4031 WG** for water based hydraulic fluids



Rugged case PAMAS GO

All versions are optionally available in the robust PAMAS GO housing.

Technical data

- 32 freely adjustable size channels
- Touchscreen
- Integrated thermoprinter
- Data transfer: ASCII Code, USB interface
- Power supply: 100–240 V, 50–60 Hz
- Battery running time approx. 4 hours

Volumetric Sensors PAMAS HCB-LD-50/50

Available size ranges:

- 1–200 µm (ISO 21501-3)
- 4–70 µm(c) (ISO 11171)
- 2–100 µm (ISO 4402)

Max. particle concentration: 24,000 P/ml* at 25 ml/min**

PAMAS HCB-LD-25/25

Available size ranges:

- 1–200 µm (ISO 21501-3)
- 1–100 µm (ISO 4402)
- 4–70 µm(c) (ISO 11171)

Max. particle concentration: 120,000 P/ml* at 25 ml/min**

Other sensors for larger particle sizes or higher concentrations are available on request.

Size

310 mm x 145 mm x 360 mm (W x H x D)

Weight:

8 kg

* Coincidence error of 7.8 %

** Other flow rates are available on request.



Management System
ISO 9001:2015

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