



## **PAMAS S4031 WG**

### **Portable particle counting instrument for water glycol based hydraulic fluids**

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

- MacDermid Oceanic HW 540
- MacDermid Oceanic HW 443
- MacDermid Oceanic HW 443 R
- MacDermid Pelagic 100
- Castrol Transaqua
- Houghton Aqualink 300F
- Houghton Aqualink 325F
- Houghton Aqualink HT-804F
- Water and chemicals for injection



# PAMAS S4031 WG

## Portable particle counting instrument for water glycol based hydraulic fluids



### 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.

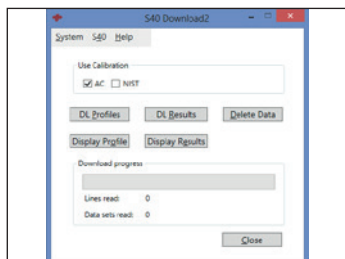
### Calibration

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®.



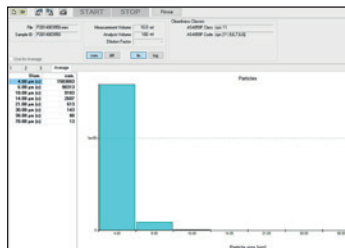
Software PAMAS Download

### 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 17216, GJB 420B, CHARN, as well as raw data.

When using the software PAMAS PMA, the measurement results can additionally be reported according to GJB 420A, NAVAIR 01-1A-17, SAE 749D, and ISO 11218.2.

### Versions

- **PAMAS S4031 WG** for water glycol based hydraulic fluids and fresh water
- **PAMAS S4031 WG Seawater** for water glycol based hydraulic fluids, fresh water, and seawater
- **PAMAS S4031 WG Corrosive** for water glycol based hydraulic fluids, fresh water, seawater, and chemicals



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

420 mm x 330 mm x 220 mm (W x H x D)

### Weight

8 kg

### Case protection

IP 64

\* Coincidence error of 7.8 %

\*\* Other flow rates are available on request.



Management System  
ISO 9001:2015

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