



## **PAMAS OLS4031** **Online particle counter** **with 32 size channels**

### **Online particle counter as fixed installation for Fluid Condition Monitoring**

#### **Applications:**

- Online measurement of hydraulic liquids up to 6 bar (or up to 420 bar on request)
- Condition Monitoring of operating fluids
- Monitoring Facility Systems in Aviation Industry
- Test Rigs for Component Cleanliness

#### **Volumetric measuring cell:**

The volumetric cell design of PAMAS sensors guarantees highest accuracy and reproducibility. Every single particle of the sample volume is analysed on its way through the measuring cell.

#### **Resolution:**

Particle measurement in 32 size channels

# PAMAS OLS4031

## Continuous contamination analysis and fluid condition monitoring



The **PAMAS OLS4031** online particle counter is a fixed installation for fluid condition monitoring. Emerged from the standard particle counter model **PAMAS S4031**, the **PAMAS OLS4031** online particle counter has been designed for online operations. The **PAMAS OLS4031** is equipped with up to 32 size channels which can be selected by the user and adjusted to the individual specific application. The **PAMAS OLS4031** is operated with the **PAMAS PMA** software for Particle Measuring and Analysis.

The standard shell is made of coated steel. For Phosphat-Ester applications, the **PAMAS OLS4031** is manufactured with a special stainless steel shell that protects the housing from corrosive liquids.



*PAMAS OLS4031 in stainless steel shell*

The integrated stepper-motor-driven pump guarantees a constant flow.

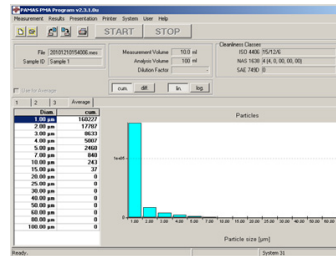
### Particle sensor

The instrument is equipped with the light extinction sensor **PAMAS HCB-LD-50/50** with a nominal flow rate of 25 ml per minute and a maximum particle concentration of 24.000 particles per ml at a coincidence rate of 7,8%. Particle sensors with a higher flow rate and a higher maximum concentration are available on request.

### Calibration

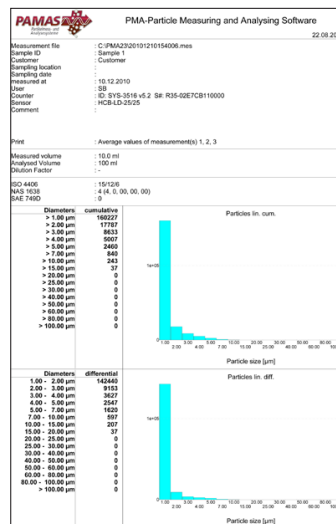
The Automatic Particle Counter is calibrated according to International Calibration Standards. The Calibration is traceable to Standard Reference Material® of the NIST (National Institute of Standards and Technology). More than one calibration can be pre-configured in a single system.

### Remote control with software PAMAS PMA



*The population histogram shows cumulative and differential particle counts.*

Automatic storage and documentation in readable format. Classification of particle number and size within the sensor's size range.



*Complete documentation showing measuring results in absolute and relative numbers*



Management System  
ISO 9001:2008

www.tuv.com  
ID 9105038017

### Technical Data

#### Particle counter:

- Particle counts in 32 channels
- 32-bit high performance
- CPU with sophisticated programmable digital domain signal conditioning and 4096 internal channels
- Data transfer: 8 bit ASCII code through RS 232 port (57600 baud)
- Power supply via alternating current: 100 - 240 V or 50-60 Hz

#### Sample pressure:

Low pressure (standard version): from pressureless up to 6 bar for single and online measurements

High pressure (on request): from 3 to 420 bar for online measurements

#### Viscosity:

at low pressure up to 200 cSt (higher rates are available at a flow rate of 10 ml per minute); at high pressure up to 350 cSt

#### Volumetric particle sensor: PAMAS HCB-LD-50/50

Measuring range:

- 4-70 µm(c) (according to ISO 11171)
- 2-100 µm (according to ISO 4402)
- 1-200 µm (according to ISO 21501)

Maximum particle concentration:

24.000 particle per millilitre at a nominal flow rate of 25 ml per minute and a coincidence rate of 7,8%.

**PAMAS HEAD OFFICE**, Dieselstraße 10, D-71277 Rutesheim, Phone: +49 7152 99 63 0, Fax: +49 7152 99 63-32, E-Mail: info@pamas.de  
**PAMAS USA**, 1408 South Denver Avenue, Tulsa, OK 74119 USA, Phone: +1 918 743 6762, Fax: +1 918 743 6917, E-mail: clay.bielo@pamas.de  
**PAMAS BENELUX**, Mechelen Campus, Schaliënhoedreef 20T, B-2800 Mechelen, Phone: +32 15 28 20 10, Mobile: +32 477 42 48 62, E-Mail: paul.pollmann@pamas.de  
**PAMAS FRANCE**, Route du Tailleur 210/136, F-40170 Saint-Julien-en-Born, Mobile +33 6 25 33 20 41, E-mail: eric.colon@pamas.fr  
**PAMAS LATIN AMERICA**, Rua Eduardo Sprada, 2819 / Suite 2, Curitiba-PR 81270-010, Brazil, Phone/Fax: +55 41 3022 5445, E-Mail: marcelo.aiub@pamas.de  
**PAMAS INDIA**, No. 203, I floor, Oxford House, #15 Rustam Bagh Main Road, Bangalore 560017, India, Phone: +91 80 41 15 00 39, E-Mail: info@pamas.in  
**PAMAS HISPANIA**, Calle Zubilleta No. 13 1ºB, ES-48991 Algorta, Mobile: +34 67 75 39 699, E-Mail: julian.malaina@pamas.de  
**PAMAS UK**, Sci-Tech Daresbury, Keckwick Lane, Daresbury, Cheshire WA4 4FS, Mobile: +44 79 17 71 33 66, E-Mail: graeme.oakes@pamas.de

Please visit our website at [www.pamas.de](http://www.pamas.de)