



## **PAMAS S40 GO** **Portable particle counter** **for the use in harsh environment**

### **Portable particle counter in the rugged case PAMAS GO**

#### **8 channel high resolution digital system for particle analysis**

- According to ISO 4406:1999 4  $\mu\text{m(c)}$ , 6  $\mu\text{m(c)}$ , 14  $\mu\text{m(c)}$  based on ISO 11171
- According to ISO 4406:1987 2  $\mu\text{m}$ , 5  $\mu\text{m}$ , 15  $\mu\text{m}$  based on ISO 4402

#### **Pressureless sampling as well as pressurised up to 420 bar (6000 psi)**

#### **User-friendly operation using touch screen with graphic display**

- Results according to: ISO 4406, SAE AS 4059 E, NAS 1638, GJB 420, GOST 17216, NAVAIR 01-1A-17
- Real portability with lab system accuracy

- User can configure the system to their needs in profiles
- Pressurised sensor avoids formation of gas bubbles
- Display and printout provide triple ISO codes, NAS and SAE cleanliness classes, measurement volumes, and particle numbers
- The volumetric cell design of PAMAS sensors guarantees the highest accuracy, resolution and best statistical information
- Password protected user levels
- Data storage of more than 4000 measurements
- User-friendly download software
- Power supply: 90-230 V AC / 50-60 Hz or 12-30 V DC or via integrated battery for up to three hours operation

# PAMAS S40 GO

## Rugged, portable, reliable – particle counting on the go



The rugged and resistant **PAMAS S40 GO** portable particle counter is built to meet the demands of the harshest environments and can be used for field analyses and for laboratory measurements. The instrument includes an integrated battery for mains free operation on site. It is small and light enough to fit into an aircraft overhead locker. The rugged case PAMAS GO is water tight and protects the instrument in harsh environments and during transportation.

The incorporated tried and tested PAMAS high resolution sensor technology is trusted throughout industry for its reliability and accuracy

User-friendly download software for transfer of stored measurement data to a PC as a basic feature. Data files are compatible with most spreadsheet software.

Standard languages are English, German, Finnish, Dutch, French, Spanish, Portuguese, Hungarian, Chinese and Russian. The system can be programmed to any other language (optional).

The optional carrying bag for the rugged case PAMAS GO is equipped with a shoulder strap and with three handy side pockets.

### Single particle counting system using volumetric sensor cells

A highly sophisticated sensor cell and optics guarantees the best resolution and accuracy even under high pressure conditions. Particle counting can be

achieved using many methods, but only the use of volumetric cells, like those used in PAMAS sensors, can guarantee that all particles passing through the sensor are counted. This results in clearer true statistical analysis and prevents the loss of information compared to in-situ cells that only detect a small area of the sample flow path.

### Applications

- Online measurements at live hydraulic systems up to 420bar
- Online measurements at non-operating systems without supporting pressure
- Offline measurement using sample bottles (laboratory mode)
- Lube oil applications
- Long term analysis
- Online analysis for component cleaning machines
- Bypass filtration monitoring
- Filter verification.

### 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 preconfigured in a single system.

### Standards

Display shows particle numbers, cleanliness classes, and size. Printout according to many international standards (e.g. ISO 4406, NAS 1638, SAE AS 4059, GJB 420, GOST 17216, NAVAIR 01-1A-17).

### Different models of PAMAS S40 GO are available.

The different **PAMAS S40 GO** particle counter models are compatible to most sample liquids. The product versions are optimised to the different pressure and viscosity ranges that are prevailing in the specific industries.

#### ▪ PAMAS S40 GO

##### Standard version:

for high and low pressure hydraulics (viscosity range up to 350 cSt)

#### ▪ PAMAS S40 GO

##### Lube oil version:

Compatible with oil based liquids of higher viscosities up to 1,000 cSt like hydraulic oil, gearbox oil, motor oil, lubrication oil, etc.

#### ▪ PAMAS S40 GO

##### Fuel version:

compatible with low viscous liquids like Diesel or kerosene

#### ▪ PAMAS S40 GO

##### Skydrol version:

compatible with Phosphate-Ester based hydraulic liquids (e.g. brake fluids)

#### ▪ PAMAS S40 GO AVTUR:

for the analysis of Aviation Turbine Fuel according to EI-IP 577 and DEF-STAN 91-91 (see extra leaflet PAMAS S40 GO AVTUR for further details)



Management System  
ISO 9001:2015

www.tuv.com  
ID 9105038017

### Technical data

#### Sampling system:

- Wear resistant ceramic piston pump with controlled constant flow
- Viscosity range up to 200 cSt (pressurised sampling up to 350 cSt; lube oil system up to 1,000 cSt)

#### Pressure range:

- Low pressure: from pressureless up to 6 bar (85 psi)
- High pressure: 3-420 bar (6000 psi)

#### Volumetric Sensor: PAMAS HCB-LD-50/50

Calibration ranges:

- 4-70 µm(c) according to ISO 11171 (standard calibration)
- 2-100 µm according to ISO 4402 (optional calibration)

Max. particle concentration:

- 24,000 P/ml at a flow rate of 25 ml/min and a coincidence rate of 7.8%.

#### Counter:

- 8-channel particle counter
- 32-bit high performance CPU with sophisticated programmable digital domain signal conditioning and 4096 internal channels
- Data printout: 32 column thermo printer
- Data transfer: 8 bit ASCII code through USB port
- Power supply: 90-240 V AC / 50-60 Hz or 12-30 V DC or via integrated battery for up to three hours operation
- Weight and Size: Approx. 8 kg 340 mm x 220 mm x 420 mm

#### Options:

- Carrying bag



**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.biolo@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**, Curitiba-Paraná, Brazil, Phone/Fax: +55 41 3022 5445, Mobile: +55 41 999 72 21 73, 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)