



## **PAMAS S4031 GO WG** **Portable Particle Counting System** **for Water Based Hydraulic Fluids**

### **Compact analysing system for hydraulic fluids in the off shore oil industry**

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

The volumetric cell design of PAMAS sensors guarantees the highest accuracy, resolution and best statistical information.

Results according to:  
ISO 4406, SAE AS 4059, NAS  
1638, GJB 420, GOST 17216,  
NAVAIR 01-1A-17.

- Real portability with lab system accuracy
- Users can configure the system to their needs in profiles
- Highest repeatability and reproducibility
- Password protected user levels
- Data storage of more than 4000 measurements
- Integrated battery for data backup
- User-friendly download software
- Power supply: 90-230 V AC / 50-60 Hz or 12-30 V DC or via integrated battery for more than three hours operation
- Display and printout provide triple ISO codes, NAS and SAE cleanliness classes, measurement volumes, and particle numbers

# PAMAS S4031 GO WG

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



The **PAMAS S4031 GO WG** is designed for field use. It is small and light enough to fit into an aircraft overhead locker. It is rugged and tough and is water tight during transportation.

Incorporating tried and tested PAMAS high quality laser based sensor technology which is trusted throughout industry for reliability and accuracy.

The pressurised sensor reduces the need for degassing allowing the counter to be plugged in and used on line up to a pressure of 100 psi.

No need to send samples to the laboratory, with an integrated liquid pump the **PAMAS S4031 GO WG** can pull its own samples from a bottle, producing results quickly where they are needed.

The **PAMAS S4031 GO WG** is simple to operate via the touch screen user interface. A variety of sampling profiles can be created according to standards such as NAS 1638 and SAE AS 4059.

The number of used size channels can be preconfigured. So, the system can optionally be preconfigured to meet customer-specific subsets of cleanliness standards (e.g. SAE AS 4059 B-F, C-F, C/F, etc.).

The sample size and the duration can also be varied and preconfigured.

The operator simply selects the sampling profile from a drop down option list on the touch screen and then proceeds by selecting start.

The unit has an integrated protection from contamination including a back flush operation to remove the contaminants from the system.

### Calibration

The Automatic Particle Counter is calibrated according to International Calibration Standards which are traceable to the NIST (National Institute of Standards and Technology).

Rugged and tough, yet truly portable, including an integrated battery for mains free operation.

The **PAMAS S4031 GO WG** is a compact field instrument for the measurement of hydraulic fluids used in the off shore oil industry.

The **PAMAS S4031 GO WG** Laser particle counter is built to meet the demands of the harshest environments.

The instrument is compatible with water based hydraulic fluids including the following:

- MacDermid: Oceanic HW 540, 443, 443r
- Castrol: Transaqua series
- Pelagic 100
- Aqualink: 325-F Houghton
- Aqualink: HT804F
- Aqualink: 300-F

### Key features

- Online continuous test capability
- Individual bottle sampling
- Portable instrument
- Light weight and compact design
- Rugged and tough
- Microsoft compatible software included
- Integrated printer
- Integrated battery
- 8 variable channels
- ISO 4406
- NAS 1638
- SAE AS 4059
- GJB 420
- GOST 17216
- NAVAIR 01-1A-17

### Applications

Contamination control and measurement of Water/Glycol fluids in the off shore oil industry

Tried and trusted for flushing and qualification of Christmas trees, Hydraulic Power Units, subsea umbilicals, hydraulic accumulators, valves and control systems. With its online option the **PAMAS S4031 GO WG** is ideal for integration into flushing rigs.



Carrying bag for PAMAS GO case

### Technical data

#### Sampling system:

- Wear resistant ceramic piston pump with controlled constant flow

#### Pressure range:

- From pressureless up to 6 bar (85 psi)

#### Volumetric sensors:

##### PAMAS HCB-LD-50/50

Size ranges:

- 4 - 70  $\mu\text{m(c)}$  (ISO 11171)
- 2 - 100  $\mu\text{m}$  (ISO 21501-3)
- 1 - 200  $\mu\text{m}$ : option on request

Max. particle concentration: 24,000 p/ml at a coincidence rate of 7.8%.

##### PAMAS SLS-25/25

Size range:

- 0.5 - 20  $\mu\text{m}$  (ISO 21501)
- 1.5 - 25  $\mu\text{m(c)}$  (ISO 11171)

Maximum particle concentration: 13,000 P/ml at a coincidence rate of 7.8%.

#### Controller:

- 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 (57600 baud)
- Power supply: 90-230 V AC / 50-60 Hz or 12-30 V DC or via integrated battery for more than three hours operation
- Weight and size: approx. 8 kg 340 mm x 220 mm x 420 mm

#### Option:

- Carrying bag



Management System  
ISO 9001:2015

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