

# LPA2 – Twin Laser Particle Analyser

## LPA2

The LPA2 is a highly precise, lightweight & fully portable instrument suitable for on-site and laboratory applications.

It can automatically measure and display particulate contamination, moisture and temperature levels in various hydraulic fluids.

### Features & Benefits

- ◆ Lightweight (Lightest in class)
- ◆ Fully portable
- ◆ Precision Instrument
- ◆ Full Calibration based on ISO11171
- ◆ Measures and displays the following international standard formats; ISO 4406, NAS 1638, AS 4059E and ISO 11218
- ◆ Moisture and temperature sensing
- ◆ Data logging and 600 test result memory
- ◆ Manual and remote control flexibility
- ◆ LPA View software (included)
- ◆ Full size QWERTY keyboard
- ◆ Various test programme settings
- ◆ Full accessories kit included
- ◆ Internal rechargeable battery capable of performing 100 tests between charges



## Technical data

<b>Technology</b>	Twin laser and twin optical diode detectors Based Light Extinction Automatic Optical Particle Analyser
<b>Particle Sizing</b>	>4,6,14,21,25,38,50,70 µm(c) to ISO 4406 Standard
<b>Analysis range</b>	ISO 4406 Code 8 to 24, NAS 1638 Class 2 to 12, AS4059 Rev.E. Table 1 Size Codes 2-12 AS4059 rev E, Table 2 Size Codes, A:000 to 12, B:00 to 12, C:00 to 12, D:2 to 12, E: 4 to 12,F: 7 to 12
<b>Accuracy</b>	Better than 3% typical
<b>Calibration</b>	Each unit individually calibrated with ISO Medium Test Dust (MTD) based on ISO 11171, on equipment certified by I.F.T.S. To ISO 11943
<b>Viscosity range</b>	Up to 400 cst
<b>Fluid temperature</b>	From +5 °C to +80 °C
<b>Pressure Max</b>	400 bar (gauge) - minimum 2 bar (gauge) required
<b>Sample Volume/Test time</b>	8 ml. (short): 2:50, 15 ml. (normal): 5:00, 30 ml. (dynamic): 10:00 24 ml. (bottle sampler): 8:00, 15 ml. (continuous): 5:00
<b>Moisture Sensing</b>	% RH (Relative Humidity) ±3%
<b>Temperature Measurement</b>	±3 °C
<b>Data Storage</b>	600 test
<b>Communication options</b>	RS232 9 pin D plug
<b>Ambient Temperature min/max</b>	-10 °C to +80 °C
<b>Environmental Protection</b>	IP51 (lid open)
<b>Weight /Dimensions</b>	7.6 kg, Height 210mm, Depth 260mm, Width 430mm
<b>Electrical Supply</b>	Voltage 9-36V DC
<b>Power</b>	Internal rechargeable battery (mains charger)
<b>Outer Casing Finish</b>	Anodised Aluminium

Patent app. no. 2354067

**LPA2 is supplied with a full software package**

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**Exclusive MP Filtri technology. The combination of the two lasers with the unique optics and photodiode package enables the LPA2 to give increased accuracy combined with excellent repeatability.**

## W-Option

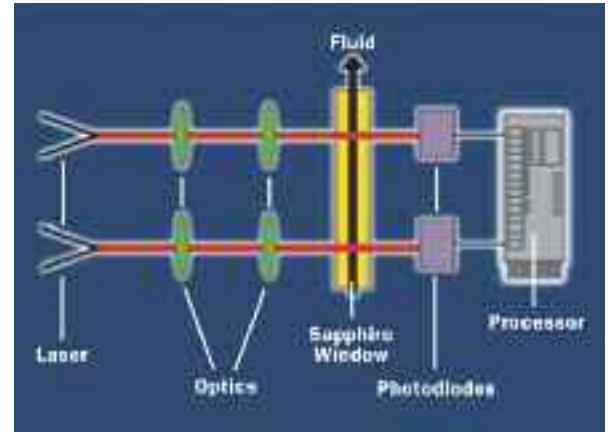
Water Saturation level (RH%) and fluid temperature sensor option.

## Laser 1

A single point high accuracy laser measures particles of contamination at 4 µm(c) and 6 µm(c) giving increased accuracy with excellent repeatability.

## Laser 2

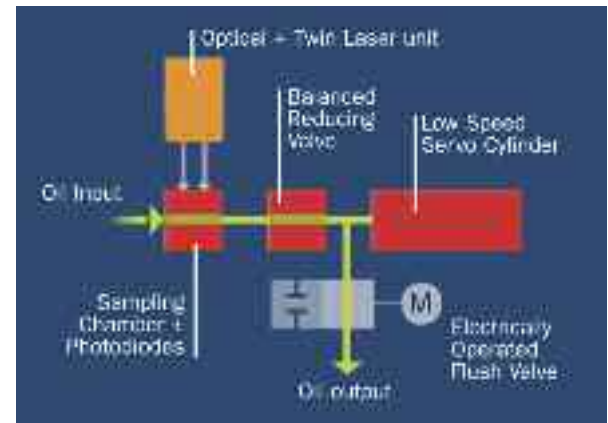
Standard accuracy laser specifically designed for system contaminants between 6 µm(c) and 70 µm(c).



## Optional Products

<b>Carry Bag</b>	CB0001
<b>In line Coarse Screen filter</b>	SK0040
<b>USB to serial port connector</b>	SK0026

The LPA2 Standard Analyser Includes accessories package: LPA-View software, hoses, waste bottle, printer paper, 12V, 2A power adapter with UK/EU/US/CN/AUS adapter heads.



## Ordering information

**Example:** 1 LPA2 2 M 3 S 4 X 5 30

### 1 - Version

<b>LPA2</b>	Without moisture and temp sensor
<b>LPA2W</b>	With moisture and temp sensor

### 2 - Fluid compatibility

<b>M</b>	Mineral oil
<b>N</b>	Subsea fluids and water based fluids <sup>(1)</sup>
<b>S</b>	Phosphate ester and aggressive fluids <sup>(1)</sup>

### 3 - Options carry bag

<b>S</b>	Standard unit with carry bag
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### 4 - Bottle sampling options

<b>X</b>	Without bottle sampling
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### 5 - Design Ref.

<b>30</b>
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<sup>(1)</sup> **N** and **S** version, moisture sensor (W) not available