

**TAKE THE LAB  
WITH YOU  
WHEREVER  
YOU GO**

**PORTABLE  
LASER  
PARTICLE  
ANALYSER  
LPA3**



**Hubame**

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# LPA3

## The world's most advanced and versatile mainstream portable laser particle analyser

Whether you are working in the lab or in the field, MP Filtri's next-gen LPA3 delivers a fast, accurate and comprehensive hydraulic health check in a robust yet portable package.

The LPA3 delivers particle counting to all international standards, as well as moisture and temperature measurement. Its real-time monitoring and proactive maintenance safeguards machinery, enhances performance and productivity, and reduces costs and unplanned downtime.

Featuring the latest breakthroughs in optical and photodiode technology, the new LPA3 enhances the reliability and longevity of complex hydraulic systems and is ideal for systems quality control in in-house manufacturing applications.

## SIX REASONS LPA3 SETS NEW STANDARDS



### ACCURACY

Using the latest LED optical technology, the LPA3 is accurate to  $\pm 1/2$  code for 4, 6, 14 $\mu$ m(c).



### MOBILITY

Highly durable and yet perfectly portable-weighing in at just 10kg (22lb).



### ANALYSIS

Real-time monitoring and proactive maintenance.



### SPEED

High-speed sample times over 16 times quicker than the LPA2.



### EFFICIENCY

Slashes costs and downtime, protects machinery and rapidly pays for itself.



### EASE OF USE

Sophisticated yet simple to use, the LPA3 can be mastered without formal training.

Robust and durable co-polymer body case

Greater storage capacity store up to 4000 tests

Increased programmable sample volumes (up to 100 ml)

Instant results download via USB



“ Our new LPA3 has enabled our customers to be sure of the cleanliness of their hydraulic systems. Warranty claims can be resolved easier, customers are confident in our process and we can cut down on oil sampling lead times. ”

**Ryan Langley**

Managing Director, Hercules Hydraulics Ltd

**Predictive maintenance technology**  
Identifying risks before they impact performance

**Pressure monitoring**  
for greater accuracy and consistency

**Fluid monitoring**  
Water control and temperature

**Simple yet sophisticated software**

**Optional thermal printer**  
for instant hard copy of results

**Online real-time monitoring**  
and super-fast sample times

**Programmable**  
10.1" full colour  
touch-screen display

**Long-life**  
lithium ion battery

LPA-3 TEST1234  
GBT 14039  
25/24/22

µm(c)	/100ml
<4	33554421
<6	8366507
<14	2097181
<21	824287
<25	131073
<38	32767
<80	8191
>75	2047

123 Bar  
65% RH  
45 °C

Normal Test

## ALL THE BENEFITS OF THE LABORATORY IN THE FIELD

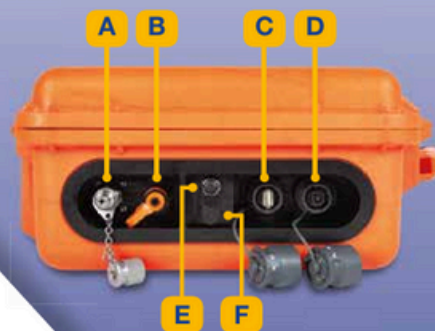
The LPA3 is robust and light - weighing in at just 10kg and its ergonomic space-efficient design enables operators to work effectively in a wide variety of challenging work environments - without having to make sacrifices to functionality.



## RANGE OF DIFFERENT CONNECTIONS

Easy-fit standard hydraulic connections maintain high environmental protection ratings. USB data connection enables rapid download of results to a data stick.

- A: M16 x 2 Test point connection
- B: Quick-release waste capture
- C: USB data stick download port
- D: PC-USB connection
- E: Power on/off with built in bi-colour LED
- F: IP rated DC charging port



## WIDE RANGE OF REPORTING FORMATS



Wherever you are working and whatever standards you are using we've got you covered. We've also added five\* new reporting standards.

## SIMPLE YET SOPHISTICATED SOFTWARE

The LPA3 is compatible with MP Filtri's innovative new CMP View software, which is both easy to master and delivers all the information, analysis and results you need at-a-glance on a single screen.





## FAST, SMOOTH LEARNING CURVE

Designed for ease of use, the LPA3 enables first time operators to get up and running in minutes - without the need for a dedicated training programme.

The machine's sophisticated functionality sets new standards in the industry but is surprising easy to master, saving customers time and money.



## WHY CHOOSE MP FILTRI AS YOUR PARTNER FOR CONTAMINATION CONTROL SOLUTIONS?

MP Filtri prides itself on being the original and the best when it comes to portable particle counters.

The celebrated LPA2 set new standards in the industry at launch - and this new incarnation enhances and improves the original machine's market-leading functionality - delivering faster results, greater accuracy, more storage, extensive customisation options, and a more robust and portable design.

MP Filtri has a proud heritage spanning more than 50 years as an innovator in the hydraulic filtration industry and has forged a growing reputation for the quality of its products and its customer service.

When the vast majority of hydraulic failures are caused by contamination - can you afford not to team up with MP Filtri and ensure your machinery is maximising its efficiency and potential?

## MARKET-LEADING VERSATILITY

Not only is the LPA3 designed to thrive in a wide range of sectors and applications, the machine can also be personalised for peak performance with operators able to tailor sample volumes and flush sizes.

The amount of tests run concurrently.

Capable of completing the 100 ml sample test in just one minute.



# FLEXIBILITY BUILT-IN AS STANDARD

The ultimate hydraulic health check for a wide range of different sectors.

Fast, accurate and easy to use, the LPA3 quickly identifies the levels of contamination in your systems at the touch of a button.

Offering both real-time monitoring and predictive maintenance technology it is an essential tool for anyone serious about maximising the efficiency and performance of hydraulic systems.

Reduced downtime, lower operating costs and longer lifespans of machinery are just some of the benefits the LPA3 will deliver.

## KEY INDUSTRY SECTORS



### Mobile

Portable and precise, the LPA3 is ideal for applications where accuracy is vital even in challenging and variable working conditions.



### Offshore

Capable of handling aerospace phosphate ester, mineral and synthetic oil, subsea/offshore water based fluids and more....



### Industrial

Keeps production lines working at full capacity – ensuring the best in performance and productivity.



### Aviation

Minimises aircraft on ground downtime, dramatically reducing operational and maintenance costs.



### Test rigs

Delivers accurate and reliable comprehensive hydraulic health checks to a host of international standards.



### Machine tools

Ideal for precision tooling, injection moulding, presses and power packs – supports a wide range of industries.



## LPA3 SPECIFICATIONS



Technology	High precision LED light extinction automatic optical particle counter
Particle Sizing	>4, >6, >14, >21, >25, >38, >50, >70 $\mu\text{m}_{(c)}$
Analysis Range	ISO 4406:2017 Code 0 - 24 NAS 1638 Class 00 - 12 AS4059/ISO11218 Rev E, Table 1 Size Codes 00 - 12 AS4059/ISO11218 Rev E, Table 2 Size Codes A-F - 000 - 12 AS4059 Rev F, Table 1 Size Codes A-F - 000 - 12 AS4059 Rev F, Table 2 Size Codes A-F - 000 - 12 GBT14039 Code 0 - 24 GJB420B Size Codes A-F - 000 - 12 GOST 17216
Accuracy	$\pm 1/2$ classe pour codes 4, 6, 14 $\mu\text{m}_{(c)}$ $\pm 1$ classe pour tailles superieures
Calibration	Individually calibrated with ISO Medium Test Dust (MTD) based on ISO 11171, on equipment certified by I.F.T.S. ISO 11943
Viscosity Range	Up to 400cSt
Fluid Temperature	<b>Minimum:</b> -25°C / +41°F <b>Maximum:</b> +80°C / +176°F
Ambient Temperature	<b>Minimum:</b> -10°C / +14°F <b>Maximum:</b> +80°C / +176°F
Pressure	<b>Minimum:</b> 2.0 bar / 29 psi <b>Maximum:</b> 420 bar / 6091 psi
Sample Volume	Maximum 100ml / 3.5 fl oz per pump stroke Test Volumes programmable by end user Pre-set volumes also available
Moisture Sensing	% RH (Humidité relative) $\pm 3\%$
Temperature Measurement	$\pm 3\%$
Data Storage	Up to 4000 tests
Environmental Protection	<b>IP 66</b> (Lid closed) <b>IP54</b> (Lid open)
Power	Lithium-Ion rechargeable battery 18-19V 2.1-3.0A
Weight / Dimensions	10 kg / 22lbs, <b>Width:</b> 470mm / 18.5" <b>Height:</b> 350mm / 13.8" (not including handle) <b>Depth:</b> 170mm / 6.7"

### Designation & Ordering code

PORTABLE LASER PARTICLE ANALYSER LPA3									
Series	Configuration example: LPA3 W P M 1 0 1								
<b>LPA3</b> Portable Laser Particle Analyser									
Moisture Sensor									
<b>0</b> Without moisture and temperature sensor									
<b>W</b> With moisture and temperature sensor									
Pressure Sensor									
<b>0</b> Without on-screen inlet pressure display									
<b>P</b> With on-screen inlet pressure display									
Fluid Compatibility									
<b>M</b> Mineral oil and synthetic fluids									
<b>N</b> M type fluids & Subsea fluids and water based fluids (*)									
<b>S</b> M & N type fluids & phosphate esters and aggressive fluids (*)									
External Result									
<b>1</b> With on board printer									
Design Reference									
<b>0</b> Std option with full accessory kit and carry bag									
Country Plug Type									
<b>1</b> UK, EU, US, AUS/CN									

(\*) **N** and **S** version, moisture sensor (**W**) not available Available with Screen Protector. Consult your local branch for further details