



PASSION TO PERFORM

# LPA3

Portable Particle Counter

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

NOW AVAILABLE FOR  
**AVIATION  
FLUIDS**



Find out more:  
[www.mpfiltri.co.uk](http://www.mpfiltri.co.uk)

Designed, engineered & manufactured by **MP Filtri UK**



# LPA3

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

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  $\mu\text{m(c)}$ .



### 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**

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

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

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

**Long-life lithium ion battery**

LPA-3 TEST1234  
GBT: 14039  
25/24/22

µm(φ)	/100ml
<4	33564431
<6	8388607
>14	2097151
>21	624287
>25	131071
>38	32767
>60	8191
>70	2047

123 Bar  
65% RH  
45 °C

Press the Sample (10s)  
NORMAL TEST

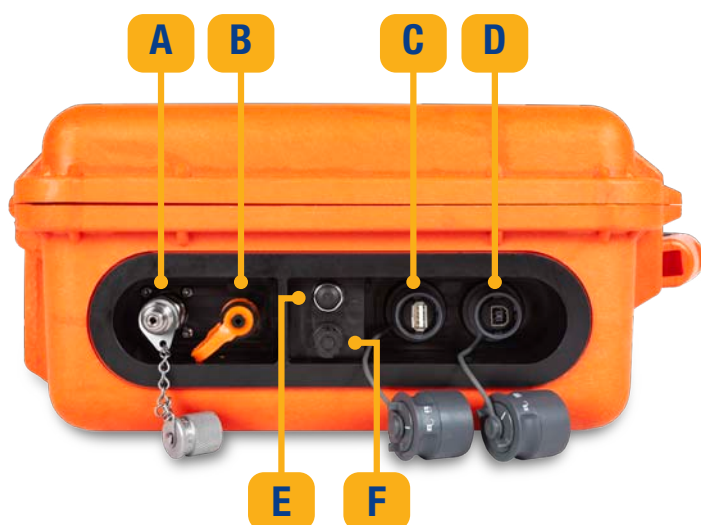
## All the benefits of the laboratory in the field

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.



## 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 100ml sample test in just one minute.



## Range of different connections

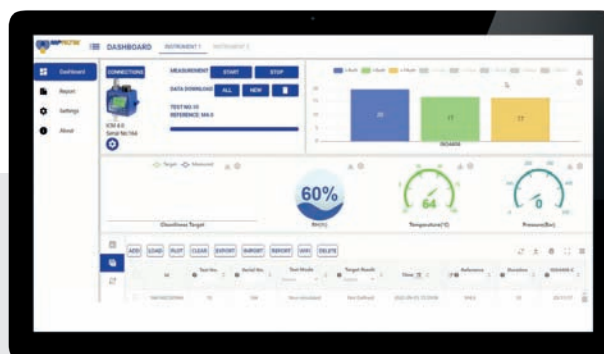
Easy-fit standard hydraulic connections maintain high environmental protection ratings. USB data connection enables rapid download of results to a data stick.

- 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.



## LPA3 Specification



Technology	High precision LED light extinction automatic optical particle counter
Particle Sizing	>4, >6, >14, >21, >25, >38, >50, >70 µm(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	± 1/2 code for 4, 6, 14µm(c) ± 1 code for larger sizes
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 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 (Relative Humidity) ±3%
Temperature Measurement	±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	10 kg / 22lbs
Product Dimensions	<b>Width:</b> 435mm / 17" <b>Height:</b> 292mm / 11" (not including handle) <b>Depth:</b> 155mm / 6"

# **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.



## **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.





## 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?

## Our Product Ranges

### Portable Particle Counters

Innovative products to suit a variety of sectors and budgets from the CML 2.0 to the Airbus approved Aviation edition LPA2.



### Bottle Samplers

A choice of 110ml and 500ml models, ideal for use in laboratories where fluid sampling at point of use is inaccessible or impractical.



### In-line Contamination Monitors

Our market-leading ICM 2.0 and ICU models deliver the ultimate hydraulic health checks and are also Industry 4.0 ready.



### Off-line Filtration Units

A comprehensive range of offline filling and filtration units to help service and maintenance teams deliver outstanding oil and hydraulic fluid cleanliness.

# LPA 3 How to order

LPA3 is compatible with MP Filtri's range of bottle samplers.

Order example	LPA3	W	P	M	1	0	1
<b>1. Contamination Monitoring Product</b> LPA3= Light Extinction Particle Counter							
<b>2. Sensor Options: Moisture</b> 0 = Without moisture and temperature sensor W = With moisture and temperature sensor*							
<b>3. Sensor Options: Pressure</b> 0 = Without on-screen inlet pressure display P = With on-screen inlet pressure display							
<b>4. Fluid Compatibility</b> M = Mineral Oil and Synthetic Fluids N = Subsea and water-based fluids** S = Aviation fluids***							
<b>5. External Result Option</b> 1= With on board printer							
<b>6. Design Reference</b> 0= Std option with full accessory kit and carry bag							
<b>7. Country Plug Type</b> 1= UK,EU,US,AUS/CN							

Available with Screen Protector (Part number 63.095000). Consult your local branch for further details.

\* Moisture and temperature sensor available for M and S series only

\*\* Moisture and temperature sensor not available for the N Series

\*\*\* For other fluid applications please contact your local MP Filtri branch

## HEADQUARTERS

### MP Filtri S.p.A.

+39 02 957031  
sales@mpfiltri.it



## BRANCH OFFICES

### ITALFILTRI LLC

+7 (495) 220 94 60  
mpfiltrirussia@yahoo.com

### MP Filtri France SAS

+33 (0)1 40 86 47 00  
sales@mpfiltrifrance.com

### MP Filtri India Pvt. Ltd.

+91-80-4147 7444 / 4146 1444  
sales@mpfiltri.co.in

### MP Filtri (Shanghai) Co., Ltd.

+86 21 58919916 116  
sales@mpfiltrishanghai.com

### MP Filtri U.K. Ltd.

+44 (0)1386 258500  
sales@mpfiltri.co.uk

### MP Filtri Canada Inc.

+1 905 303 1369  
sales@mpfiltricanada.com

### MP Filtri Germany GmbH

+49 (0) 6894 95652 2-0  
sales@mpfiltri.de

### MP Filtri Middle East FZCO

Tel: +971 43484338  
sales-me@mpfiltri.com

### MP Filtri SEA PTE Ltd. (Singapore)

Tel: +65 68162489  
sales-sea@mpfiltri.com

### MP Filtri U.S.A. Inc.

+1 215 529 1300  
sales@mpfiltriusa.com

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