



# LPA3

Portable Particle Counter

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

NOW AVAILABLE FOR  
**AVIATION  
FLUIDS**



**PASSION TO PERFORM**

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 $\mu$ m(c).



### MOBILITY

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



### 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**

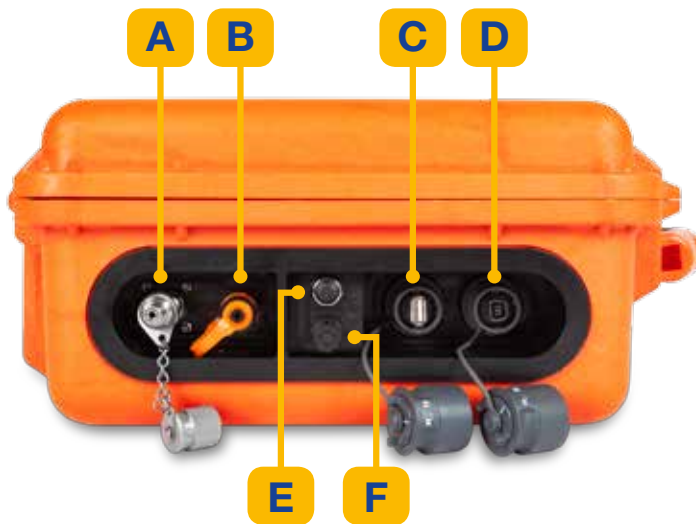
## All the benefits of the laboratory in the field

The LPA3 is robust and light - weighing in at just 10 kg, 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

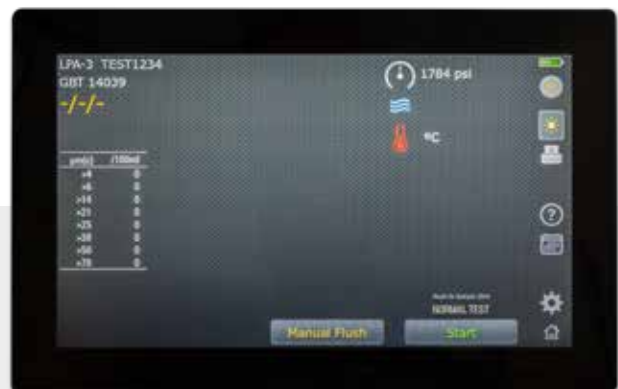
Easy-fit standard hydraulic connections maintain high environmental protection ratings. USB data connection enables rapid download of results to a data stick.

- 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.



## Easy to use interface

Simple yet sophisticated software; highly responsive touch-screen with no need for a stylus; and a customisable home screen for all your key performance information at-a-glance.



## 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



<b>Technology</b>	High precision LED light extinction automatic optical particle counter
<b>Particle Sizing</b>	>4, >6, >14, >21, >25, >38, >50, >70 µm(c)
<b>Analysis Range</b>	ISO 4406 Codes 8 to 24 NAS 1638 Class 2 to 12 AS4059/ISO 11218 Rev E, Table 1 Size Codes 2-12 AS4059/ISO 11218 Rev E, Table 2 Size Codes, A:000 TO 12, B:00 to 12, C: 00 to 12, D: 2 to 12, E: 4-12, F: 7 to 12 AS4059 Rev F, Table 1 Size Codes 2-12 AS4059 Rev F, Table 2 Size Codes cpc [000 to 12, 00 to 12, 00 to 12, 2 to 12, 4 to 12, 7 to 12] GBT14039 Codes 8-24 GJB420B Size Codes, A:000 to 12, B:00 to 12, C: 00 to 12, D: 2 to 12, E: 4-12, F: 7 to 12 Please Note: (Lower Limits are Test Volume dependent)
<b>Accuracy</b>	± 1/2 ISO code for 4, 6, 14 µm(c) ±1 code for 21, 25, 38, 50, 70 µm(c)
<b>Calibration</b>	Individually calibrated with ISO Medium Test Dust (MTD) based on ISO 11171, on equipment certified by I.F.T.S. ISO 11943
<b>Viscosity Range</b>	Up to 400 cSt
<b>Fluid Temperature</b>	Minimum: -25°C / +41°F Maximum: +80°C / +176°F
<b>Ambient Temperature</b>	Minimum: -10°C / +14°F Maximum: +80°C / +176°F
<b>Pressure</b>	Minimum: 2 bar / 29 PSI Maximum: 420 bar / 6091 PSI
<b>Sample Volume / Test time</b>	Maximum 100 ml per pump stroke. Test volumes programmable by end user
<b>Moisture Sensing</b>	% RH (Relative Humidity) ±3%
<b>Temperature Measurement</b>	±3%
<b>Data Storage</b>	Approximately 4000 timestamped tests in the integral LPA3 memory
<b>Environmental Protection</b>	IP 66 (Lid closed) IP54 (Lid open)
<b>Power</b>	Long-life Lithium Ion internal rechargeable battery (mains charger)
<b>Weight / Dimension</b>	10 kg, Height 292 mm, Depth 155 mm, Width 435 mm

# 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.



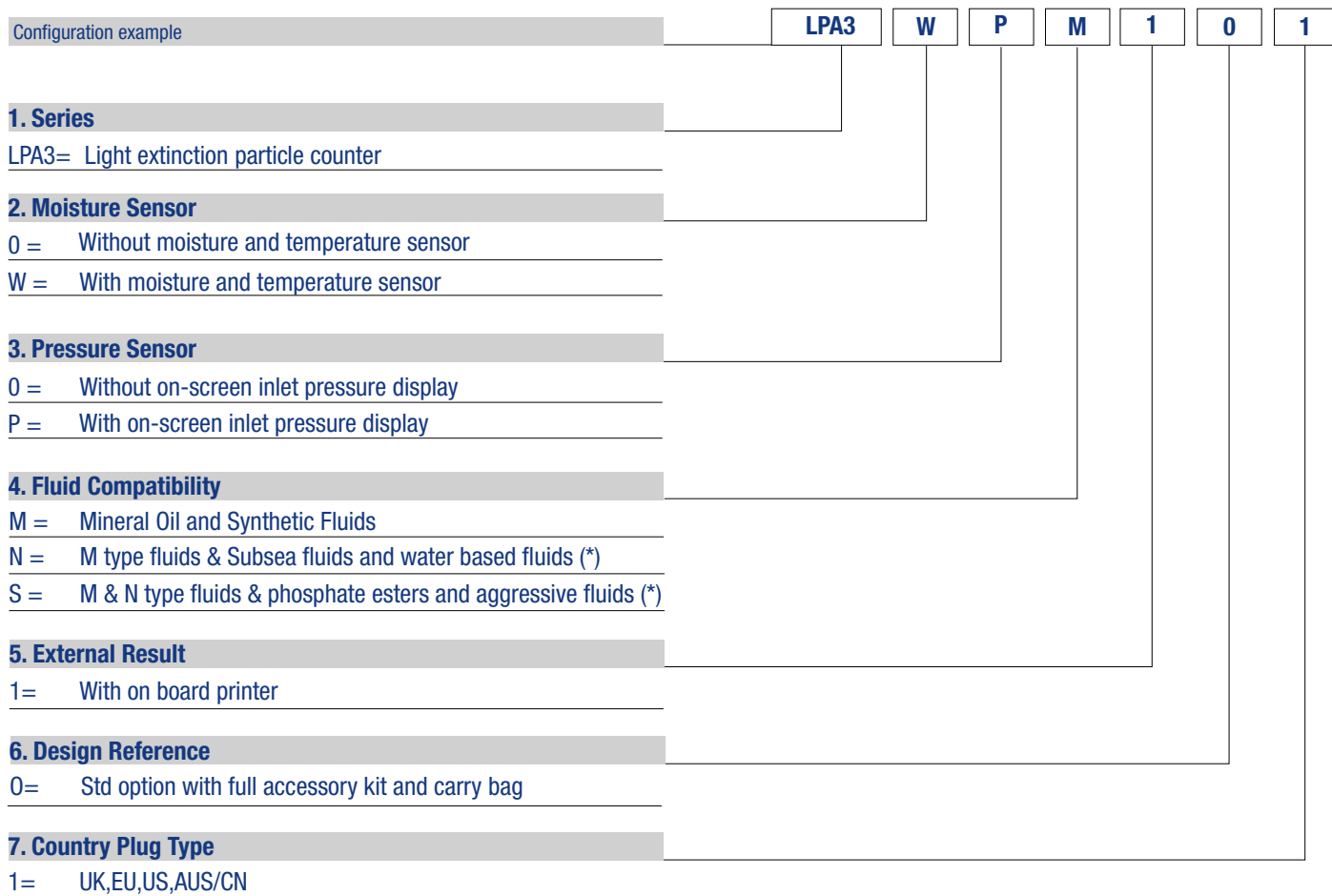
### Off-line Filtration Units

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



# LPA3 How to order

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



(\*) N and S version, moisture sensor (W) not available  
 Available with Screen Protector (Part number 63.095000). Consult your local branch for further details

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All information stated in this brochure is correct at time of printing and subject to change without notice.