



 $\pm$  1/2 code for 4, 6, 14 $\mu$ m<sub>(c)</sub>.  $\pm$  1 code for larger sizes.



## **EASY AS 1-2-3**

Using the CML4 is as easy as 1-2-3 with just three stages required to take you from connecting up your portable contamination monitor to the oil sample and then accessing real-time results through to long-term trend analysis and proactive maintenance.





Suction connection and waste outlet in use

# **CONNECT YOUR OIL / HYDRAULIC FLUIDS**

The first step is simply to connect the CML4 to an Online M16 test point (pressure range 2-420 bar / 29-6091 psi) or to the applications reservoir (zero pressure). The CML4 features a self-priming metering pump which enables analysis of unpressurised systems. Easy-fit standard hydraulic connections maintain high environmental protection ratings.

#### **Electrics**

- A: USB data stick download port
- B: USB C PC connection port
- C: DC charging port
- Power on/off

#### **Hydraulics**

- Pressure connection port
- E Suction connection port
- Waste outlet





Right side

# **EASY TO USE INTERFACE**



Simple yet sophisticated software with a highly-responsive touch-screen, designed to deliver bright visuals for outside working in sunny conditions, and an intuitive home screen enabling you to view all your key performance information at a glance.

The CML4 can be mastered without the need for formal training and enables operators to begin measuring the condition of hydraulic oils in a matter of minutes.

The 7" high-resolution touchscreen display delivers fast, accurate results in a wide variety of reporting standards. You can also set languages, alarms and tolerance limits at the tap of the screen.



#### HAND-HELD BLUETOOTH PRINTER

**ACCESS REAL-TIME** 

ONBOARD RESULTS

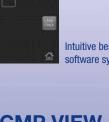
Should you need to output a physical analysis report there is an option to use this hand-held printer as part of the analysis process for instant hard copy results.

This lightweight and compact unit (just 185 x 120 x 50mm) can be easily connected to the CML4 via Bluetooth. It offers high-speed, low-noise, black and white printing using thermal printing technology with a print width of 48mm onto a 15mm core paper roll. This portable printer comes equipped with a large capacity rechargeable lithium battery to guarantee power for extended working in the field.

The CML4 shows real time results on its high-resolution display. Designed for simplicity the software allows new users to get up and running in minutes without the need for formal training.



Intuitive bespoke software system





## **CONNECT TO CMP VIEW** FOR TREND ANALYSIS

Results can be downloaded onto a USB Data Stick and transferred to a PC, or you can connect directly to the computer via a USB C connection. CMP View software enables operators to analyse data over time, opening up the potential for long-term trend monitoring and preventative monitoring strategies.

Created in-house especially for MP Filtri's range of contamination monitors, the award-winning CMP View is the most advanced software of its type in the

Results and analysis can be viewed at-a-glance on a single screen in a variety of different graphical formats, tracking not just trends in particle contamination but also relative humidity, as well as temperature levels.





# THE PERFECT PORTABLE CONTAMINATION MONITOR

Rugged and robust, the CML4 thrives in the most challenging working conditions.

Compact and portable, it's ideal in the field, while a long-life battery enables the operator to work all day without the need for recharging.

#### Effective hydraulic healthcheck

Quickly identify levels of contamination in systems, the CML4 is an ideal tool for operators who need to ensure their hydraulic systems are always functional.

#### Any system, anytime, anywhere

The inclusion of an in-built, self-priming pump means it can analyse particle contamination in both pressurised and unpressurised systems, making it an ideal tool for service engineers.

#### **Boosting your business**

Featuring predictive maintenance technology, the CML4 flags up potential problems before they impact on performance. This delivers such key benefits to your business as: reduced downtime, lower operating and service costs, and longer lifespans of machinery.

## **KEY INDUSTRY SECTORS**



#### **Mobile**

Portable and precise, the CML4 is ideal for applications where accuracy is vital even in challenging and variable conditions.



#### Construction

Keeps your fleet and key operational machines at peak performance without the risk of unplanned downtime.



#### Industrial

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

### **CML4 SPECIFICATION**



Technology	High precision LED light extinction automatic optical contamination monitor
Particle Sizing	>4, >6, >14, >21, >25, >38, >50, >70 μm <sub>(C)</sub>
Reporting Standards	ISO 4406, ISO 11218  NAS 1638  AS4059 Rev G, Table 1  AS4059 Rev G, Table 2  GBT 14039  GJB 420 B  GOST 17216
Accuracy	$\pm$ 1/2 code for 4, 6, 14 $\mu$ m <sub>(C)</sub> $\pm$ 1 code for larger sizes
Calibration	Calibrated with ISOMTD in accordance with ISO 21018 - Part 1 and Part 4
Viscosity Range	Up to 400 cSt
Fluid Temperature	Minimum: +5°C / +41°F Maximum: +80°C / +176°F
Ambient Temperature	<b>Minimum:</b> -10°C/+14°F <b>Maximum:</b> +60°C/+140°F
Operating Pressure	Offline: Maximum 2 bar / 29 PSI Online: Maximum 420 bar / 6092 PSI
Moisture Sensing	% RH (Relative Humidity) ±3%
Temperature Measurement	±3%
Data Storage	Up to 4000 tests
Environmental Protection	IP65 (Lid closed) IP54 (Lid open)
Power	Lithium-lon rechargeable battery
Battery Life	8 hrs approx
Weight (unit only)	8.5 kg / 18.7 lbs
Product Dimensions	Width: 352 mm / 13.8" Height: 149 mm / 5.8" (not including handle) Depth: 297 mm / 11.7"



#### Renewable energy Minimises unplanned downtime, dramatically reducing operational and maintenance costs.



# **Plant hire**Delivers peace of mind after servicing and after the vehicle is rented to customers.



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

# WORLDWIDE NETWORK

CANADA • CHINA • FRANCE • GERMANY • INDIA • SINGAPORE UNITED ARAB EMIRATES • UNITED KINGDOM • USA



PASSION TO PERFORM

