MPFILTRI®

PASSION TO PERFORM

DISCOVER THE POWER OF CONNECTIVITY

ICM 4.0
Inline Contamination Monitor

WiFi Enabled

Industry 4.0 Ready

Compatible with **CMP View**

14/12/10

RH 38% 30°C

MP

ICM 4.0

Find out more:
www.mpfiltri.co.uk

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

ICM 4.0

All the data - wherever you are, whenever you need it.

MP Filtri's highly-acclaimed Inline Contamination Monitor has raised the bar again - adding full wifi connectivity to its market-leading feature set, accuracy and repeatability.

A 24/7 real-time monitoring and critical early warning system, the ICM 4.0 delivers the ultimate in hydraulic health checks - with all data accessible via a sophisticated software suite and an innovative new mobile phone app.

SIX REASONS
THE ICM 4.0 SETS THE STANDARD

ACCURACY
Using the latest LED optical technology, the ICM 4.0 is accurate to ± 1/2 code for 4, 6, 14μm(c).

CONNECTIVITY
Wifi-enabled for instant access to machine performance.

ANALYSIS
Real-time monitoring and predictive maintenance. Full 8-channel measurement.

INFORMATION
Measures particle contamination, moisture levels and temperature levels in hydraulic fluids.

EFFICIENCY
Reduces costs and downtime, protects machinery and rapidly pays for itself.

EASE OF USE
Sophisticated yet simple to use software that makes performance analysis easy.

Live real-time monitoring
Instant hydraulic health checks

Large storage capacity
Store up to 4000 tests on internal memory

Robust and durable
Die-cast aluminium body - IP 64 protection

Fast, customisable test results
Adjust test times and intervals to your personal specification

Space efficient
Perfect for confined environments

Easy to master
Simple, straightforward interface

Outstanding connectivity
Utilising the latest WiFi technology

Detailed, accurate results
Exceptional repeatability and full
8-channel measurement

Predictive maintenance technology
Identifying risks before they impact
performance

Accessibility
Monitor your devices through a single
app / webpage

User-friendly
Multi-coloured alert indicators for fast
issue recognition

**Non-WiFi Connections
also available.**
Modbus, Canbus, 4-20mA
signal and switched alarm
relay outputs.

COMPREHENSIVE RANGE OF CONNECTION OPTIONS

Wifi connectivity ensures you can access and share real-time data and analysis instantly via a number of different platforms.

Available options include:

- **All connections from ICM 2.0:**
  Modbus, Canbus, 4-20mA signal and Switched alarm relay outputs (WiFi replaces the need for the remote connector).

- **Cloud based systems:**
  Capability to connect to customers own cloud-based systems via Modbus. User access to all ICMs on the same network, including remotely via VPN.

- **Web browser readouts:**
  Generated from the unique IP address of each ICM 4.0.

- **Mobile App:**
  Available for Apple iOS and Android devices.

- **MP Filtri's CMP View software:**
  Monitors results and provides detailed trend analysis for a complete operational overview of the performance of every machine in the factory.

The ICM 4.0 should be a key weapon in your fight against contamination.

Cloud compatibility

Industry 4.0 READY

The ICM 4.0 is fully Industry 4.0 compliant and when combined with a cloud package - enables you to track the performance and contamination levels of every single machine you operate in real time - wherever you are in the world.

Accuracy for efficiency

Complete 8-channel measurement, accuracy to within ± 1/2 code and outstanding repeatability means that at any moment you can gather a precise snapshot of the health of your hydraulic fluid - preventing damage, downtime and high maintenance costs.

Designed for ease of use

Built around simple yet sophisticated software that can be mastered in hours, the ICM 4.0 has been created for ease of use, allowing you to customise settings and access all the information you need on a single screen.

Wide range of reporting formats

Wherever you are working and whatever standards you are using we've got you covered. International standards include: ISO 4406; NAS 1638; and AS4059 Rev E.

CMP VIEW SOFTWARE
POWER TO ANALYSE

Getting the very best from your Contamination Monitoring Products

- Revolutionary new graphical interface displaying all key results visually on a single screen
- Ability to view short and long term contamination trends
- Real-time analysis
- Easy learning curve with no need for formal tuition
- Purpose-built for MP Filtri's CMP product range
- Enables fast, easy operation of ICM devices

Instant results delivered to your fingertips

At MP Filtri we deal in solutions - providing you with a purpose-built easy-to-use, mobile phone app that lets you access all the key information from your ICM 4.0 at the touch of a button. The app is free and is compatible with both Android and Apple devices.

Download on the **App Store**

GET IT ON **Google Play**

ICM 4.0 Specification

Technology	LED based light extinction automatic optical particle counter
Particle Sizing	>4, >6, >14, >21, >25, >38, >50, >70 µm(c)
Analysis Range	SO 4406: Code 0 to 24; NAS 1638 Class 00 to 12; AS4059/ISO11218 Rev E, Table 1 Size Codes 2-12; AS4059/GJB420B Rev E, Table 2 Size Codes A-F 000-12*; AS4059 Rev F, Table 1 Size Codes 2-12; AS4059 Rev F, Table 2 Size Codes, cpc[000 to 12]* (Lower limits test dependent)
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 1000cSt
Fluid Temperature	**Minimum:** -25°C / -13°F **Maximum:** +80°C / +176°F
Ambient Temperature	**Minimum:** -10°C / +14°F **Maximum:** +55°C / +135°F
Pressure	**Minimum:** 0.5 bar / 7 PSI **Maximum:** 420 bar / 6091 PSI
Sample Volume	Adjustable 10 - 3600 seconds. Factory set to 120 seconds. Start delay & programmable test intervals available as standard
Data Storage	Up to 4000 tests
Environmental Protection	**IP 64** versatile IK04 Impact Protection
Power	Voltage 9-36V DC
Weight	1.6 kg / 3.85lbs
Product Dimensions	**Width:** 123mm / 4.8" **Height:** 142mm / 5.6" **Depth:** 65mm / 2.6"

*See product literature for analysis range per size

TAKE YOUR ICM 2.0
TO THE NEXT LEVEL

All the advantages of WiFi connectivity can be enjoyed via your existing ICM 2.0 with a simple upgrade.

MP Filtri's new WiFi extender (WFXI) is fully compatible with ICM 2.0 devices and can be connected quickly and easily to your existing machine, bringing all the advantages of the new machine to your business at a stroke.

The WiFi extender enables you to connect, not only to the new mobile app, but also to the new CMPView Software, LPAView, and even generates full information to your web browser thanks to its unique IP address.

The WiFi extender delivers high-speed connectivity while being highly space efficient, ensuring it can still be fitted in cramped environments.

For more details, check out our latest product updates at **www.mpfiltri.com**

Please note: To ensure your version of the ICM 2.0 can be upgraded to wifi, please contact **technical@mpfiltri.co.uk** informing us of your serial number.

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 Inline Contamination Monitors and Portable Particle Counters.

The celebrated ICM 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?

Key Industry Sectors

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

Offshore
Capable of handling aerospace phosphate ester, mineral and synthetic oil, subsea/ offshore water based fluids and more....
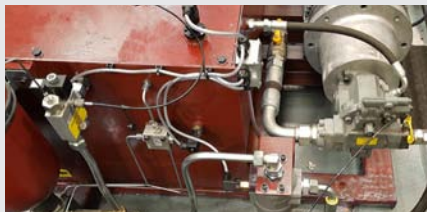
Industrial
Keeps production lines working at full capacity – ensuring the best in performance and productivity.

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

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

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

ICM How to order

Order example | | | ICM | W | M | K | U | G1 | 4.0

1. Contamination Monitoring Product

ICM=   Inline Contamination Monitor

2. Sensor Options: Moisture

0=   Without moisture and temperature sensor

W=   With moisture and temperature sensor

3. Fluid Compatibility

M=   Mineral Oil and Synthetic Fluids

N=   Subsea and water-based fluids *

S=   Phosphate, ester and aggressive fluids *

4. Display Option

0=   Without LCD and keypad control

K=   With LCD and keypad control

5. Output Option

R=   With relays /external alarm outputs

U**=   Test record transfer (direct to USB stick) plus relays/external alarm outputs

6. Hydraulic Connection Option

G1=   M16x2 test points

G3=   1/4"BSPP female ports

G4=   7/16th UNF female ports

7. Design Reference

2.0=   ICM 2.0

4.0=   ICM 4.0 with integral WiFi

ICM 2.0 WiFi Enabling Option

ICM-WFXI=   ICM 2.0 Wifi Extender***

* N & S version, moisture sensor (W) not available   ** U version not available in 4.0 design reference   *** Please check with MP Filtri UK quoting your ICM 2.0 serial number to ensure compatibility.

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