ICM 4.0
Inline Contamination Monitor

DISCOVER THE POWER OF CONNECTIVITY

Compatible with
MP Filtri Connect

Available from
App Store
Google Play

Find out more:
www.mpfiltri.com

WiFi Enabled
Industry 4.0 READY

Passion to Perform
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

Visit: www.mpfiltri.com / www.mpfiltri.co.uk
User-friendly
Multi-coloured alert indicators for fast issue recognition

Predictive maintenance technology
Identifying risks before they impact performance

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

Accessibility
Monitor your devices through a single app / webpage

Outstanding connectivity
Utilising the latest WiFi technology

Non-WIFI Connections also available.
Modbus, Canbus, 4-20mA signal and Switched alarm relay outputs.

Visit: www.mpfiltri.com / www.mpfiltri.co.uk
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

- **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 Software Systems:**
  - MP Filtri Connect Software: For a complete operational overview of the performance of every machine in the factory.
  - LPA View software: Monitors results and provides detailed trend analysis.

The ICM 4.0 should be a key weapon in your fight against contamination.
MONITORING
HAS NEVER BEEN EASIER

The ultimate performance ‘snapshot’ for a wide range of different sectors

In addition to the convenient mobile phone app, MP Filtri has released a comprehensive new windows-based MP Filtri Connect software which gives you a complete overview of your entire operation. Benefits include:

- Monitor as many machines as you like in as much detail as you want - with colour coded conditions for early warning.
- Customise the information you’d like to see at a glance.
- Monitor contamination, temperature and the ISO code.
- Comprehensive results history with up to 4,000 tests stored on the machines internal memory.

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.

Visit: www.mpfiltri.com / www.mpfiltri.co.uk
# ICM 4.0 Specification

<table>
<thead>
<tr>
<th>Technology</th>
<th>LED based light extinction automatic optical particle counter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particle Sizing</td>
<td>&gt;4, &gt;6, &gt;14, &gt;21, &gt;25, &gt;38, &gt;50, &gt;70 μm(c)</td>
</tr>
<tr>
<td>Analysis Range</td>
<td>ISO 4406:2017 Code 0 to 24</td>
</tr>
<tr>
<td></td>
<td>NAS 1638 Class 00 to 12</td>
</tr>
<tr>
<td></td>
<td>AS4059 Rev E, Table 1 Size Codes 2-12 A-F 000 (Lower limits test dependent)</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± 1/2 code for 4, 6, 14μm(c) ± 1 code for larger sizes</td>
</tr>
<tr>
<td>Calibration</td>
<td>Individually calibrated with ISO Medium Test Dust (MTD) based on ISO 11171, on equipment certified by I.F.T.S. ISO 11943.</td>
</tr>
<tr>
<td>Viscosity Range</td>
<td>Up to 1000cSt</td>
</tr>
<tr>
<td>Ambient Temperature</td>
<td>Minimum: -10°C / +14°F  Maximum: +55°C / +135°F</td>
</tr>
<tr>
<td>Pressure</td>
<td>Minimum: 0.5 bar / 7 PSI  Maximum: 420 bar / 6091 PSI</td>
</tr>
<tr>
<td>Sample Volume</td>
<td>Adjustable 10 - 3600 seconds. Factory set to 120 seconds. Start delay &amp; programmable test intervals available as standard</td>
</tr>
<tr>
<td>Data Storage</td>
<td>Up to 4000 tests</td>
</tr>
<tr>
<td>Environmental Protection</td>
<td>IP 64 versatile IK04 Impact Protection</td>
</tr>
<tr>
<td>Power</td>
<td>Voltage 9-36V DC</td>
</tr>
<tr>
<td>Weight</td>
<td>1.6 kg / 4.85lbs</td>
</tr>
<tr>
<td>Product Dimensions</td>
<td>Width: 123mm / 4.8“  Height: 142mm / 5.6“  Depth: 65mm / 2.6”</td>
</tr>
</tbody>
</table>

## 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 dongle 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 dongle 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 dongle 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](http://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.

Visit: www.mpfiltri.com / www.mpfiltri.co.uk
ICM How to order

Order example

1. Contamination Monitoring Product
   ICM = Inline Contamination Monitor

2. Sensor Options: Moisture
   O = 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
   O = 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
   G2 = 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

* N & S version, moisture sensor (W) not available ** U version not available in 4.0 design reference

HEADQUARTERS
MP Filtri S.p.A.
+39 02 957031 sales@mpfiltritalia.it

BRANCH OFFICES
ITALFILTER LLC
+7 (495) 220 94 60
mpfiltrirussia@yahoo.com

MP Filtri Canada Inc.
+1 905 303 1369
sales@mpfiltricanada.com

MP Filtri France SAS
+33 (0) 1 40 86 47 00
sales@mpfiltrifrance.com

MP Filtri Germany GmbH
+49 (0) 6894 95652 2-0
sales@mpfiltride

MP Filtri Indiia Pvt. Ltd.
+91 80 4147 7444 / +91 80 4146 1444
sales@mpfiltrico.in

MP Filtri (Shanghai) Co., Ltd.
+86 21 58919916 116
sales@mpfiltrishanghai.com

MP Filtri U.K. Ltd.
+44 (0) 1451 822 522
sales@mpfiltrico.uk

MP Filtri U.S.A. Inc.
+1 215 529 1300
sales@mpfiltriusa.com

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