MINIMAC®
Systems pvt. ltd.

ISO 9001:2015 ISO 14001:2015 ISO 45001 : 2018

Automatic Oil Condition Monitoring Instruments

Automatic oil condition monitoring instruments are primarily used for accurate analysis. Compared to manual oil condition monitoring instruments, these are relatively more expensive. The results of these instruments can be highly accurate and reliable since they are operated with the minimum amount of human interference.

Testing instruments offered under this category of products are:

- **Portable online laser particle counters (NAS Analysers)**
- **In Line Contamination Monitor(NAS Analysers)**
- **Portable offline-cum-online laser particle counters (NAS Analysers)**
- **BDV test kit**
- **Automatic Karl Fischer titrator**

Karl Fischer Titrator | **CML2** | **LPA3** | **ICM** | **BDV Test Kit**

Watch Video | Product Details | Read Article

MAKE IN INDIA | Ministry of MSME, Govt. of India | GeM Government e Marketplace | एन एस आई सी NSIC National Small Scale Industries Corporation | EEPCINDIA ENGINEERING THE FUTURE

Minimac Systems Pvt. Ltd.
GST No: 27AAICM4730E1ZL
1800 1209 003 enquiry@minimac.in
www.minimacsystems.com
Gat No 448/15, Success Industrial Park Nighoje, Khed, Chakan, Pune, Maharashtra 410501

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LPA3 - Portable Particle Counter

TAKE THE LAB WITH YOU WHEREVER YOU GO

LPA3 The world's most advanced mainstream portable particle counter Whether you are working in the lab or in the field, Minimac's next-gen LPA3 delivers a fast, accurate and comprehensive hydraulic health check in a robust yet portable package. 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 ± 1/2 code for 4, 6, 14µm(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

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Features

" The precision and extensive functionality of the LPA3 make it an essential tool, enabling us to eradicate even minute levels of contamination and give our customers an edge over the competition." Wayne Hubball Technical Director, Reynolds CC

Online real-time monitoring and super-fast sample times

Optional thermal printer for instant hard copy of results

Predictive maintenance technology - identifying risks before they impact performance

Programmable 10.1" full colour touch-screen display

Long-life lithium ion battery

Simple yet sophisticated software

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Features

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.

Easy to use interface

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

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 maximizing 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.

Motorised Vacuum Pump

Cellulose Nitrile Membrane Filter Paper

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Specifications

Technology	Twin Laser based Light Block technology/ scattering technology particle counting method.
No. of Channels for Solid Particle Measurement	8 Channels of particle size measurement - 4, 6, 14, 21, 25, 38, 50, 70 microns
Particle Sizing	>4, >6, >14, >21, >25, >38, >50, >70 µm(c)
Fluid Compatibility	Standard Mineral Oils & Synthetic Fluids (FRF)
Moisture Sensor	No
Temperature Sensor	No
Viscosity Range	Up to 400cSt
Analysis Range	ISO 4406:2017 Code 8 to 24. NAS 1638 Class 2 to 12
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
Fluid Temperature	
Minimum	+5°C / +41°F
Maximum	+80°C / +176°F
Ambient Temperature	
Minimum	10°C / +14°F
Maximum	+80°C / +176°F
Pressure	
Minimum	2 bar / 29 PSI
Maximum	420 bar / 6091 PSI
Sample Volume	Maximum 100ml / 0.035 fl oz per pump stroke Test Volumes programmable by end user Pre-set volumes also available
Air bubble Correction	Air bubble removal arrangement for correct counting using external vacuum type pumping arrangement.
Carry Case	Portable Carry Case (Preferably Pelican) with rough and tough application compatibility.
Online & Offline Capability	Online measurement of oil samples directly from Hydraulic PowerPack system pressure & Offline testing with the usage of external vacuum type pumping arrangement (Bottle Sampler Unit).

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Specifications

Operation Control	Operation through push buttons and LCD display available which shows instant results, particle counts of various range of sizes
Mandatory Touch Screen LED Display	User friendly Touch Screen display for 10.1” screen with facility to result display and fully programmable for mode change, control, setting of test time and testing sample, setting of Testing Standard, historic result display etc.
	LED Display, Programmable 10.1” full colour touch-screen display
	Display Shows particle numbers, cleanliness classes, size etc. in single view
Mandatory Touch Screen Operation Control	Complete Operation control using full touch screen display
	LED Display, Programmable 10.1” full colour touch-screen display
	As equipment is portable and to be used at On-Site, No requirement of laptop connectivity should be mandatory to perform any setting.
	Soft Touch Button/ Touch pad controls or any other mode of operation other than touch screen shall not be acceptable.
Integrated In-built Printer	Integrated In-built thermal Printer for instant hard copies of result is available as mandatory supply.
	Instant Printing of Historic results by selecting the data from the touch screen display should be possible.
Result Download	Downloadable via USB (Results can be created in PDF & Excel Format)
Data Storage	Approximately 600 tests in the particle counter itself.
Environmental Protection	IP51 (Lid open)
Power	Lithium-Ion rechargeable battery 18-19v 2.1-3.0A
Weight	10 kg / 22lbs
Product Dimensions	Width: 435mm / 17” Height: 292mm / 11” (not including handle) Depth: 155mm / 6”
Power Source	Internal rechargeable battery (Series 41) or external 12V DC power supply (Series 40)
Power Back Up	Sufficient Hours in Field Operation

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ISO 9001:2015 ISO 14001:2015 ISO 45001 : 2018

ICM - In Line Contamination Monitor

- **Low Cost & Compact**
- **Water & Dust Resistant**
- **Real time system analysis**
- **Easy integration to control systems**
- **Simple installation & operation**
- **Available in ATEX version**

Applications

When it comes to condition monitoring, MP Filtri Ltd provides the expertise & response required by a fast moving global hydraulic industry.
A continual focus on quality & business improvements means that we can provide the best solution and service for our customers.


Diesel Systems


Test Rigs


Lubrication


Mining/Heavy Engineering


Renewable Energy


Motorsport


Harbour systems


Off- shore


Aviation Systems


Emerging technologies

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In Line Contamination Monitor

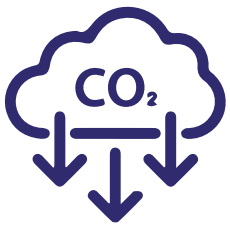
The ICM automatically measures and displays particulate contamination, moisture and temperature levels in various hydraulic fluids. Itis designed specifically to be mounted directly to systems, where ongoing measurement or analysis is required, and where space and costs are limited.

- **8 channel contamination measurement & display**
- **Measures and displays ISO 4406:1999, NAS 1638, AS 4059E and ISO 11218**
- **Moisture and temperature sensing**
- **Data logging and 4000 test result memory**
- **Manual, automatic and remote control functionality**
- **Multicolour LED and remote alarm signaling**
- **Robust die cast aluminum construction**
- **LPA View software (included)**
- **Previous ten result viewing capability**

W Water and Temperature Sensing

The ICM "W" option indicates water content as a percentage of saturation and oil temperature in degrees centigrade. 100% RH corresponds to the point at which free water can exist in the fluid. i.e. the fluid is no longer able to hold the water in a dissolved solution.
The sensor can help provide early indication of costly failure due to free water, including but not exclusive to;

Corrosion
Metal surface fatigue e.g. bearing failure
Reduced lubrication & load carrying characteristics



REDUCE YOUR CARBON FOOTPRINT

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Specifications

Technology	LED Based Light Extinction Automatic Optical Particle Counter
Particle Sizing	>4,6,14,21,25,38,50,70 µm(c) to ISO 4406 1999 Standard
Analysis Range\Formats	ISO 4406: 1999 Code 0 to 25 NAS 1638 Class 00 to 12 AS4059 Rev.E. Table 1&2 Sizes A-F: 000 to 12 ISO 11218 00-12 (Lower Limits are Test Time dependent)
Accuracy	± 1⁄2 code for 4, 6 14um(c). ± 1 code for larger sizes.
Calibration	Each unit individually calibrated with ISO MediumTest Dust (MTD) based on ISO 11171 (1999), on equipment certified by IFTS.
Operating Flow Rate	20 - 400 ml/minute
Viscosity Range	≤ 1000 cSt
Fluid Temperature	–25 to +80 °C *Pressure limited
Pressure	Max 400 barg. *Temperature limited * For high frequency pressure pulse applications contact MP Filtri Ltd
Test Time	Adjustable 10 - 3600 seconds. Factory set to 120 seconds. Start delay & programmable test intervals available as standard
Moisture Sensing	% RH (Relative Humidity) ±3%
Temperature Measurement	±3°C
Flow rate measurement	Indication only
Data Storage	4000 tests
Comms Port	RS485, RS232, MODBUS, CANBUS
Ambient Temperature min/max	-25°C to 80°C non K version -25°C to 55°C K version
Environmental Protection	IP 65/67 versatile IK04 Impact Protection
Weight	1.15kg
Electrical Supply Voltage	9-36V DC

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Specifications

Supply Current	12V 24V 36V
Basic Unit	70mA 40mA 30mA
With -K (Keypad)	150mA 80mA 60mA
Power Consumption	<2.2W
Outer Casing	Polyurethane BS X34B.Colour BS381-638 (Dark Sea Grey)
	Approval: BS2X34A & BS2X34B, MM0114 & SP-J-513-083 T. II Cl. A
	Performance: MIL-PRF-8528
Wetted parts	M - C46400 Cu alloy, 316 stainless steel, viton, FR4,sapphire.
	N - 316 stainless steel, viton, sapphire.
	S - 316 stainless steel, perfluoro elastomer, sapphire, EPDM

M N S Fluid Compatibility

The ICM can operate across a number of fluid types meeting the needs of most major hydraulic markets.

	Wetted Parts	Typical Fluids
M	Brass, Viton, FR4	Synthetic, diesel, petroleum and mineral based
N*	Austenitic Stainless Steel and Viton	Off-shore and water based fluids
S*	Austenitic Stainless Steel and Perfluroelastomer	Phosphate Ester & Aggressive**

*Please note: N & S versions are not available with the water sensor option. Consult MP Filtri Ltd where necessary for guidance on fluid compatibility.

K Keypad Option

Keypad – Adds 6 key keypad and 128 x 64 pixel back-lit graphical display.

K Version

Non K Version
(OEM Product)

R Relays

The ICM "R" option displays & operates over 8 channels comprehensively covering all of the applied standard formats. It allows fully customisable alarm settings and indicates these via a multicolour LED and/or remote customer control systems.

Alarm Types -

- **Contamination codes and/or individual particle sizes**
- **Water content**
- **Temperature**

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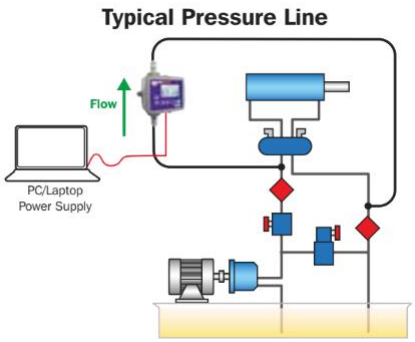
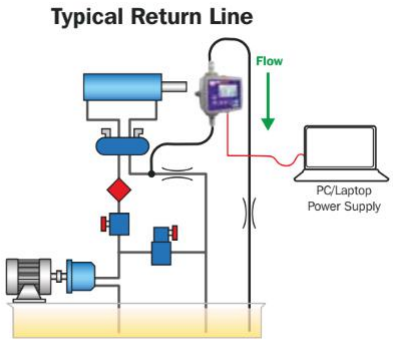
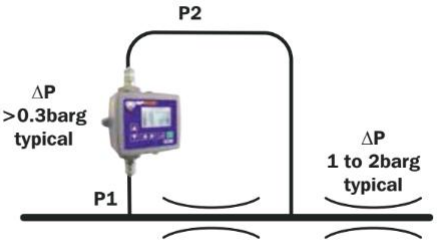
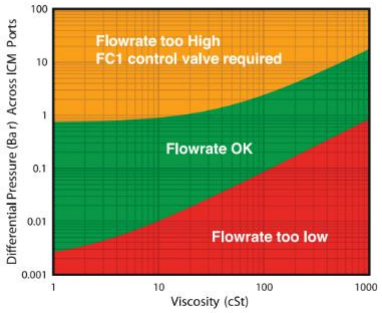
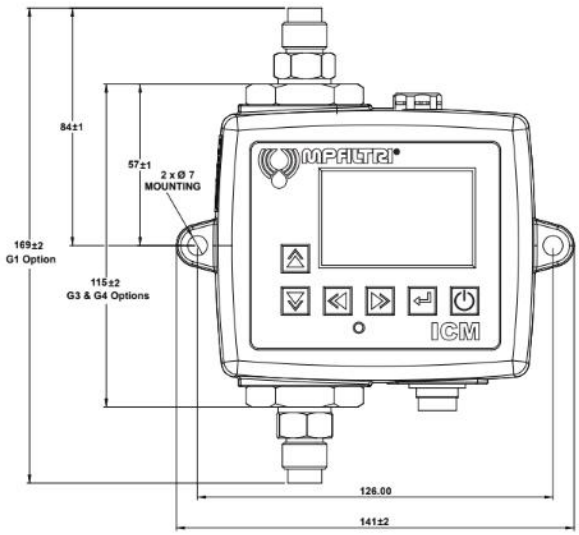
ICM – Installation Guidance

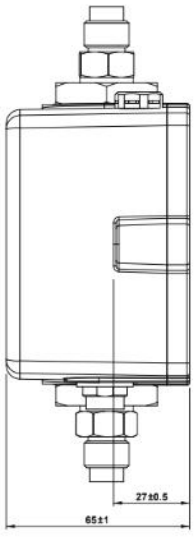












The ICM must be in a vertical orientation, with the oil flowing upwards through it.

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Accessories

Auxiliary Communications

Auxiliary communication devices are available to order with the ICM. A USB interface which allows for communication via a laptop (RS485 to RS232 converter) or an ethernet device for remote access via a network hub. Both devices can transmit power to the ICM/RDU electrical circuit using a DC power adapter. The USBi has the additional benefit of supplying power via the USB cable directly. Both devices come with a DC Power adapter and 3m twisted pair cable as standard.

ICM-RDU

The ICM RDU (Remote Display Unit) is advantageous when the ICM is out of reach or in a location unsuitable for viewing. The ICM can also be controlled via the RDU.

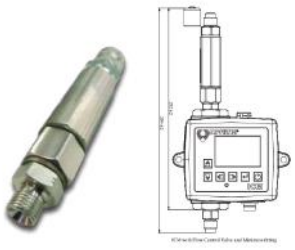
*Note; Installation dimensions are the same as the ICM.

ICM-FC1

A pressure compensated flow control valve specifically designed to fit the ICM. This may be needed if the application produces an oil flow greater than 400ml/min through the ICM. ICM-FC1 - is supplied with adaptors which enable the valve to be fitted to the ICM. Max Pressure - 400barg Usable Flow Range - 4barg to 400barg ΔP

How to Order

ICM	FC1	M	G1
ICM	FC1	M	G3
ICM	FC1	N	G1
ICM	FC1	N	G3
ICM	FC1	S	G1
ICM	FC1	S	G3



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LPA View Software

When connected to LPA View, the ICM can transfer results in realtime, or alternatively historical results can be downloaded from the ICM's inbuilt memory.

- **Runs on Windows 2000, XP, Vista and Windows 7.**
- **Full adjustment & control of product settings, test times and alarms**
- **Easy test report generation**
- **Trend analysis**
- **Graphical display options**
- **Universal format across our contamination monitoring product range**

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Portable offline-cum-online laser particle counters (NAS Analysers)

The light-weight & compact portable particle counter
CML2 & CML2-W - Now with internal battery option
To complement the Minimac range of particle counters, the CML2 series utilizes the features and benefits of the LPA2 & PML2 series, in a compact unit. **Designed to be used in conjunction with the LPA View software**

Series 40 - Mains operated
Series 41 - Includes an Internal Rechargeable Battery

The CML2 Contamination Analyser is designed to measure and quantify the numbers of solid contaminants in Hydraulic, Lubrication and Transmission applications. The CML2 is a portable, accurate, instrument suitable for 'on-site' applications utilizing mineral oil as the operating fluid. The CML2-W has the additional feature to allow the measurement of % saturation of water in oil (RH), and temperature (°C).

- **No compromise on accuracy**
- **Low-cost unit**
- **Easy to use**
- **Compact**
- **Lightweight and Portable - 350 x 320 x 150 deep**
- **Field-application oriented product**
- **Can also be used in conjunction with the MP range of bottle sampler products**
- **Online to 400 bar/6000 psi**
- **Results displayed in ISO 4406:1999, NAS 1638, SAE A54059E**
- **LCD display for results**
- **600 test memory**
- **Complete range of test options**
- **Variable time & test programs**
- **Programmable by laptop or PC**
- **Water and temperature option**
- **Various power supply options**

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CML2 Data sheet

Each CML2 supplied consists of the following -

- **1 x CML2 Condition Monitoring Product**
- **1 x Calibration certificate**
- **1x CML2 user manual**
- **1 x LPA View CD Rom, software package**
- **1 x LPA View test analysis software manual**
- **1 x USB to serial converter Computer connecting cable**
- **1x Minimess hose x 1.5 m long**
- **1 x Waste hose x 1.5 m long**
- **1 x Waste bottle**
- **1 x Power Adapter**

(Series 40: 15V,24W. Series 41: 12V/24W)

CML2 Series 40 Compact Particle Counter with Accessories.
100+ Test Capable External Power Pack available as Optional Extra (.CM-BO)

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Specifications

Technology	Automatic Optical Particle Analyser
Laser Package	Twin Laser and Twin Optical Diode Detectors
Sensitivity	>4, 6,14.21.25,38,50, 70 um (c), micron range to revised ISO 4406 Standard
Accuracy	Better than 3% typical
Calibration	Each unit is individually calibrated with ISO Medium test Dust (MTD) based on ISO 11171:1999 on equipment certified by IF.T.S.
Analysis Range	ISO Code 8 to 24 to ISO 4406 NAS 1638 Class 2 to 12 AS4059 Size Codes A:000 to 12, B00 to 12, 00O to 12, D:2 to 12, E 4 to 12. F: 7-12
CML2 Sample Volume	15ml (normal), 30ml (dynamic), 24ml (triple). 15ml (continuous), 8ml (short)
Operation	Max. system pressure: 400 bar. Min. working pressure: 2 bar.
Viscosity Range	to 400 centistokes
Operating Temperature	+5° 10 +80°C
Electrical Requirement	12 to 24V DC, 1 amp max
Moisture & Temperature Measurement	Included on CML2-W model
Fluid Compatibility	Mineral oil & petroleum based (consult MP Flitri for other fluids)
Data Storage	Approximately 800 tests
CML2 Dimensions	Overall: Heignt 152mm Width 295mm Length 340mm
CML2 Weight	4.75 kg

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Specifications

CML2 Series 41 Compact Particle Counter and
Internal Rechargebale Battery with Accessories

Series 40 - 15 volt DC Power Supply
Series 41 - (Battery Included Series) 12 Volt Mains Power Adaptor. Series 41 will perform approx. 60 tests before the battery requires recharding.

Mineral oil, Offshore Fluid and Phosphate Ester compatible versions available

CML2

The CML is a portable, accurate instrument suitable for on-site applications utilizing mineral oil as the operating fluid. It can automatically measure and display particulate contamination, moisture and temperature levels in various hydraulic fluids.

Features & Benefits

- Compact
- Super lightweight
- Mains Operated/battery (if fitted)
- Full Calibration based on with ISO11171
- Measures and displays the following international! standard formats; 150 4406:1999, NAS 1638AS 4059 E and ISO 11218
- Data logging and 600 test result memory + Manual and remote control flexibility
- Full accessories kit included

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Technical Data

Technology	Twin laser and twin optical diode detectors Biased light Extinction Automatic Optical Contamination Monitor
Particle Sizing	24.6,14.21.20.38,60,70 micron) to ISO 4406 1999 Standard
Analysis Range	ISO 4406: 1999 Code 8 to 24, NAS 1638 Class 2 to 12, A84059 Rev.E. Table 1 Size Codes 212 AG4059revE,Table 2 size Codes,A:000 to12, B:00 to12,C:00 to 12,D:2 to12,E:4 to 12,.F:7 to12
Accuracy	Better then 3% typical
Calibration	Each unit individually collaborated with ISO Medium Test Dust (MTD) based on SO 11171. on equipment certified by IFTS. To ISO 11943
Viscosity Range	Up to 400 cst
Fluid Temperature	From +5"C to +801C
Pressure Max	400 bar minimum 2 bar gauge required
Sample volume /test time	8 mt. (short: 2350. 15 ml. normal: 5:00. 30 ml. (dynamic 10:00) 24 ml. (bottle sampler): 8:00, 15 ml (continuous): 5:00
Moisture Sensing	% RH(Relative Humidity) +/- 3
Temperature Measurement	+/- 3 C
Data Storage	600 test
Communication Options	RS2329 pin D plus
Ambient Temperature Min/Max	-10*Cto +80°C
Environmental Protection	IP51 (lid open)
Weight /Dimensions	4.75 kg. Height 152 mm, Depth 295mm, Width 340 mm
Electrical supply	Voltage 9.36 DC
Power	Internal rechargeable battery (series 41) or external 12V DC power supply(series 40)
Outer Casing Finish Injection	Molded HPX&reg, high performance resi

Ordering Information

Ordering information

	1	2	3	4	5
Example:	CML2	M	S	X	41

1 - Version

CML2	Without moisture and temp sensor
CML2W	With moisture and temp sensor

2 - Fluid compatibility

M	Mineral oil
N	Subsea fluids and water based fluids[1]
S	Phosphate ester and aggressive fluids[1]

3 - Options

S	Standard unit

4 - Options bottle sampler

X	Without bottle sampler

5 - Series

40	With display and Push buttons, mains powered
41	With display and Push buttons, with internal rechargeable battery

[1] **N** and **S** version, moisture sensor (W) not available

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www.minimacsystems.com
Gat No 448/15, Success Industrial Park Nighoje, Khed, Chakan, Pune, Maharashtra 410501

BDV Insulating Oil Tester Fully Automatic - NMC Series

Insulating oil being an efficient cooling medium with high dielectric strength has been a recognized insulating medium in electrical equipment. Acids, oxidation, sludge, gasses, and water all contribute to the degradation of oil. Dielectric strength tests demonstrate the changes caused in oil by these processes. A fully automatic, microcontroller-based insulating oil tester with an integrated printer is available in the MC Series. Over the past 28 years, the NMC Series has been the industry standard for insulating oil testers.

Features

- Easy operation-Fully automatic test cycle along with average BDV display.
- Automatic change of sample number of tests.
- Automatic calendar and time running even with power off.
- Recall and print the last 99 test results stored for 100 years even with power off.
- Programmable: Number of tests, Settling time, stir time, and waiting time.
- LCD displays: Test status, HV rise, HV fall, BDV of previous test and test results.
- Tests to: IEC 156, IS 6792, JIS C2101, BS 5874, VDE 0370 etc.
- Countdown display of time in 'Settling, Stir, and Waiting' modes.
- Built in printer.
- RS 232 interface (optional).
- Zero start safety and test chamber access interlock.
- Ergonomic design, completely user friendly-just 35 kg in weight.

System Description

The system is fully automatic and carries out tests according to the set or chosen menu like Number of tests, Settling time, Stir time and Waiting time'. System time, setting of test parameters, status and data is displayed on LCD. Audio beep is given after the test is complete and the results can be printed on a built-in printer. The test results can be recalled for view.

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Specifications

Input Supply	220±10% Volts AC, 50 Hz, single phase
Test Voltage	Model: NMC - 60 (60kV.) Model: NMC - 80 (80kV.) Model: NMC - 100 (100kV.)
Capacity	Model: 1.2kVA. Model: 1.6kVA. Model: 2kVA.
Wave form Distortion	≤ 3%
Accuracy	< 1.5%
Time of Breakdown	≤ 10 millisecond
Rate of rise of Voltage	2 kV per second ± 20%
kV Indication	Three digit
Test number indication	One digit
User defined settings	a) Calendar, sample number b) Number of Tests Settable from 1 to 6 times c) Settling time Settable from 0-999 seconds d) Stirring time Settable from 0-999 seconds e) Waiting time Settable from 0-999 seconds
Test cell with Electrodes	Type 'OC-5': 36 mm mushroom electordes Type 'OC-7': 25 mm flat disc electordes Type 'OC-9': 13 mm round electordes
Gap Gauge	2.5 mm
Printer	Built in printer for printing results
Construction	In light weight aluminum cabinet with removable cover, lock and lifting handles
Temperature Range	5 to 40° C
Relative Humadity	≤ 85% RH

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Specifications

Working Altitude	< 1500 meters
Dimensions/Weight (Approx)	NMC-80: 38 x 37 x 37 cm. Net 35 kg./ NMC-100: 43 x 40 x 40 cm. Net 45 kg.
Standard Accessories	1) Test cell type 'OC-05' 1 Number 2) Mains cord 1 number 3) Paper roll 1 number 4) Spare fuses 2 numbers 5) Operating Manual 1 number
Optional Accesssories	**Test cells**: 'OC-7' or 'OC-9'. **Gap gauge**: 2 mm

Specifications subject to change due to constant upgradation

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Digital Automatic Karl Fischer Titration Apparatus Model - Coulometric Principle

This instrument works on the Coulometric Principle and is used to estimate minute traces of moisture in samples. It incorporates the latest microprocessor based circuitry. Water Contents in the sample is estimated by measuring the amount of electrolysis current to produce required Iodine. This is an absolute technique that does not require Calibration of Reagent. The result is displayed in PPM, Percentage and mg of water contents in the sample. The instrument is supplied completely ready for operation but without chemicals. The instrument has a printer port for the printer interface. This model is supplied WITHOUT printer.

Features

- Built-in Magnetic Stirrer.
- Automatic Drift Compensation.
- Online messages for user friendly operations
- Online information of the Titration Status
- Audio Signal indicates End Point of the Titration
- Error Messages informs problem regarding electrode.

Specifications

Method	Coulometric Titrator
Measuring Range	1 PPM to 100 % with appropriate sample quantity
Resolution	0.001 mg.
Accuracy	+/- 0.01 mg.
Electrode	Dual Platinum Electrode and Generator Electrode with Diaphragm
Display	20 Character x 4 line LCD Backlit Display
Keyboard	4 x 4 Feather Touch Keyboard
Printer Port	25 Pin D type Parallel Port for Dot Matrix Printer

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Standard Accessories

- Titration Assembly with Amber Vessel
- Generator
- Sensing Electrode and Rotor 1 No.
- Silicone Vacuum Grease. 1 No.
- Set of Syringes with Needles. 1 No.
- Measuring Cylinder 1 No.

Titrator Type	Volumetric	Volumetric	Volumetric	Coulometric
Precision Dispenser Unit	✓	✓	✓	NA
Readability	0.01 ml	0.01 ml	0.01 ml	0.001 mg
Display	4 line LCD	4 line LCD	Graphic	4 line LCD
Printer Interface	✓	✓	✓	✓
Printout as per GLP Format			✓	
PC Interface		✓	✓	
PS2 Interface			✓	
Method Storage Facility			100 Methods	
Common End Users	R&D/QC Labs	R&D/QC Labs	R&D/QC Labs	Industries where minute traces of moisture is estimated
Specific Application	Pharmaceutical, Chemical, Agriculture, Distilleries, Dairy, Fine Chemicals and Petroleum Industries			Transformer Insulation Industries

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