



OMNIS IC

Modular ion
chromatography
tailored to your needs

PEOPLE
YOU
CAN
TRUST

OMNIS IC – Ion chromatography flexible, reliable, and easy to use

OMNIS IC redefines ion chromatography. This high-end chromatography system combines superior flexibility with maximum reliability and straightforward operation. With OMNIS IC, you achieve high-quality results faster, with less effort – and at lower cost of ownership. With OMNIS you go beyond ion chromatography by combining IC, titration, and NIR spectroscopy on the same platform.

10 reasons for OMNIS IC

1

FULL CUSTOMIZATION

Configure your IC according to your needs.

2

UPGRADABILITY

Expand your OMNIS IC at any time thanks to its modular design (patent pending).

3

DETECTION AND HYPHENATION

Choose various detection options (conductivity, UV/VIS, amperometry) and easily integrate third-party devices, e. g., mass spectrometers.

4

HIGH SAMPLE THROUGHPUT

Run up to 160 samples (5 mL) and 6 side pods (50 mL) completely unattended.

5

COMPACT DESIGN

The integrated auto-sampler allows a single tower solution, requiring minimal bench space.

6

SAMPLE PREPARATION

Benefit from fully integrated Metrohm Inline Sample Preparation (MISP) techniques such as ultrafiltration, dilution, and more.

7

SMART ELUENT CARE

Save time with eluent production on demand and convenience features such as AutoPurge and AutoRinse.

8

RELIABILITY

Trust in consistent, high-quality results thanks to intelligent hardware and software features such as iColumns, flow monitoring, pre-run and equilibration checks, and automatic recalibration.

9

SAFE OPERATION

Rely on automatic leak detection and fill level monitoring of eluents and reagents.

10

COMPLIANCE

Fully comply with the regulations of GLP and FDA 21 CFR Part 11.



Next-level ion chromatography, built on experience

OMNIS IC combines cutting-edge, Swiss engineering with our expertise from decades of application development, allowing you to work more intuitively, precisely, and efficiently.



Features that make a difference in your daily routine analysis

- 1 Reagent Organizer Liquid Control**
Enables fill level monitoring and fully automated eluent production.
- 2 Multi Flow Monitoring**
Controls the liquid flows that matter.
- 3 Transparent door, interior lighting, and status LEDs**
Provide a clear system overview and improve visual monitoring.
- 4 Pull-out trays**
Enable fast and easy exchange of iColumns, inline sample preparation components, and simplify vial placement into the autosampler.
- 5 New design of peristaltic and high-pressure pumps**
Enable more precise flows of liquids and pulsation-free eluent flow.
- 6 New dosing concept for Dosing Drive**
Enables liquid handling with maximum precision and accuracy – and with dedicated IC cylinder units.
- 7 Various options for valves and injectors**
Enable customized functionalities such as AutoPurge and AutoRinse.
- 8 Integrated autosampler**
Saves space on the lab bench; integrates rinse and dilution station and advanced liquid handling options.
- 9 OMNIS software and mobile control**
Graphical user interface, programming of custom methods by drag & drop, automated workflows, and much more. Connect up to 1000 clients in an OMNIS Client/Server network. Control your OMNIS IC with your mobile device.

A scalable platform – Seamlessly expand your OMNIS IC system

OMNIS IC gives you the freedom to choose the configuration that fits your specific requirements and can be upgraded anytime as your needs evolve.

Start with a compact system for routine analysis (OMNIS IC S), add advanced liquid handling with inline sample preparation and intelligent monitoring (OMNIS IC M), or go all-in with dual-channel performance for maximum throughput (OMNIS IC L).

Each configuration is built on the same modular platform, ensuring flexibility without compromise. With OMNIS IC, your investment is future-proof, and your possibilities are limitless!

OMNIS IC S – The smart way to start into ion chromatography

The **OMNIS IC S** series is your gateway into high-quality routine analysis. This single-channel IC is ideal for laboratories that want both user-friendliness and the possibility to adapt to changing analytical requirements. Any OMNIS IC S instrument can be easily upgraded and expanded, allowing you to increase your range of applications.

KEY FEATURES

- Compact starter IC: Your solution for high-quality daily routine analysis.
- Future-proof flexibility: Modular design for easy upgrades and additional functionalities (e.g., Metrohm Inline Sample Preparation).
- Full compatibility: Can be combined with OMNIS IC Autosamplers, advanced detectors, and third-party devices.



OMNIS IC S single-channel system for standard anion analysis with chemical suppression. This setup includes basic sample introduction and intelligent column recognition and is usually combined with the OMNIS IC Autosampler. It is ideal for routine analysis, e.g., of drinking or surface water, and can be upgraded with any additional IC functionalities.



OMNIS IC S single-channel system for standard anion analysis with sequential suppression and a degasser for eluent stability. This system includes a column thermostat unit for temperature-controlled separations and is usually combined with the OMNIS IC Autosampler. The setup is suitable for complex tasks such as the determination of oxalides, where thermal regulation and enhanced suppression are essential.

OMNIS IC M – Made for the toughest analytical challenges

The **OMNIS IC M** series is our premium single-channel ion chromatography system. Configured for even the most challenging analytical tasks, it provides enhanced modularity, automation, and maximum throughput. The OMNIS IC M series combines all essential units and capabilities for high-performance IC: Conductivity detection, sequential suppression, column thermostat,

eluent/solution degasser, 7/3 injector, peristaltic pump, intelligent dosing, and reagent organization – all in one compact system. With the possibility to integrate inline sample preparation (MISP), automated eluent production on demand, and advanced flow monitoring, the OMNIS IC M maximizes analytical reliability and minimizes manual intervention.



OMNIS IC M – High-end (single-channel) IC usually combined with the OMNIS IC Autosampler delivering maximum throughput, automation, and reliability.

KEY FEATURES

- Smart sample preparation and intelligent injection techniques: Integrated OMNIS MISP Unit for inline sample preparation (ultrafiltration, dilution, dialysis, matrix elimination) and intelligent injection techniques such as partial loop and pick-up injection or preconcentration.
- Built-in precision: Column thermostat, intelligent dosing, and OMNIS Multi Flow Monitor Unit for stable conditions and consistent results.
- Automated smart reagent management: OMNIS Reagent Organizer Liquid Control (ROLC) for liquid level control and automatic eluent production on demand including AutoPurge.
- Optional two-column convenience: Install anion and cation columns and switch automatically between sequences – no manual rearrangement required.

OMNIS IC L – The dual-channel powerhouse

The **OMNIS IC L** is our flagship ion chromatography system. This dual-channel system is ideal for laboratories that demand speed, precision, and scalability. It integrates two conductivity detector units, sequential suppression, column thermostat, degasser, peristaltic pump, 7/3 injectors, intelligent dosing, and reagent organization – all in one system. With the possibility to

integrate sample preparation (MISP), automated eluent production on demand, advanced flow monitoring, and parallel sample determination, the OMNIS IC L maximizes sample throughput and stands out with exceptional efficiency and reliability.



OMNIS IC L – High-end, dual channel IC usually combined with the OMNIS IC Autosampler for demanding applications, maximum sample throughput, automation, and reliability.

KEY FEATURES

- Complete dual-channel performance: Run anion and cation analyses simultaneously for maximum throughput.
- Smart sample preparation and intelligent injection technique: Integrated OMNIS MISP Unit for inline sample preparation (ultrafiltration, dilution, dialysis, matrix elimination) and intelligent injection techniques such as partial loop and pick-up injection or preconcentration.
- Built-in precision: Column thermostat, intelligent dosing, and OMNIS Multi Flow Monitor Unit for stable conditions and consistent results.
- Automated smart reagent management: OMNIS Reagent Organizer Liquid Control (ROLC) for liquid level checks and automatic eluent production on demand including AutoPurge for both channels.

OMNIS IC – Your configuration, perfected

OMNIS IC gives you maximum freedom, long term security, and the confidence that your IC system can grow with your analytical challenges – today, tomorrow, and beyond.

With more than 5 OMNIS Extension Modules and 25 functional Units (pumps, degasser, MSM and MCS, column thermostats, MISP Unit, OMNIS Multi Flow Monitor Unit, OMNIS Reagent Organizer Liquid Control, multiple detectors, injectors, dosing cylinders, selectors), the OMNIS IC is designed to meet any laboratory demand (>10³⁴ combinations) – from routine water analysis to complex matrix separations or MS-coupled applications.

YOU DEFINE EXACTLY WHAT YOU NEED

Local Metrohm IC experts configure the system together with you, ensuring that your OMNIS IC aligns with your analytical tasks, your throughput targets, and your budget. When your analytical requirements grow you can seamlessly expand your OMNIS IC system.

Configure
YOUR IC!

Upgrade
and extend
at any time!

Be ready for all
future demands –
one instrument –
unlimited possibilities!



Customized OMNIS IC S Module with chemical suppression for robust and straightforward anion analysis.

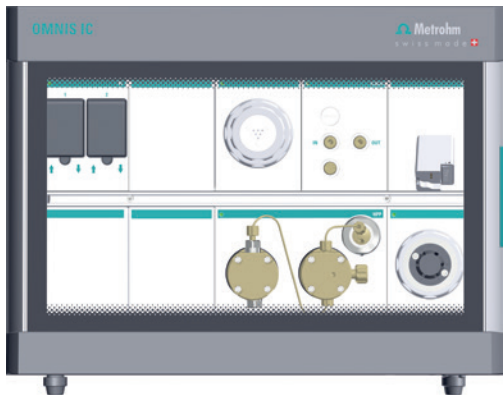
OMNIS IC S Module with sequential suppression and eluent production on demand – upgradeable with OMNIS Extension Modules and functional Units.



OMNIS IC for dual-channel analysis with eluent production on demand. Flexible for further upgrades with OMNIS Extension Modules and functional Units.

OMNIS IC S, M, L – The features at a glance

From the smart entry-level system to the modular premium solution and the dual-channel flagship for maximum throughput: Each configuration is built on the same platform, ensuring upgradeability and future-proof performance.



OMNIS IC S



OMNIS IC M



OMNIS IC L

Instrument type	Single-channel	Single-channel with option for switching between columns	Dual-channel
Ideal for	Routine analysis	Routine analysis of demanding applications	Complex or parallel applications
Throughput	++	++	+++ (dual-channel parallel determination)
OMNIS Reagent Organizer Liquid Control (ROLC)	–	✓	✓
OMNIS Multi Flow Monitor Unit	–	✓	✓
Leak detection	✓	✓	✓
Peristaltic pump channels	2	1	1
Dosing drive	–	1	1
High-pressure pump	1	1	2
Standard injector	6/2 injector	7/3 injector	7/3 injector
Conductivity detector	1	1	2
Chemical suppression (ChS) or sequential suppression (SeS)	ChS/SeS	SeS	SeS
Sample preparation and advanced liquid handling options	+	++	+++
Compatible with extended detectors and 3 rd party devices	✓	✓	✓
Upgradability (functional Units, Extension Modules)	✓	✓	✓

Higher throughput, better reproducibility – OMNIS IC automation

The OMNIS IC Autosampler and OMNIS IC Autosampler COOL are completely integrated in your OMNIS IC system saving space on the lab bench.

Both autosamplers offer unmatched sample capacity, flexibility, precision, and sample safety.

Why does OMNIS IC automation stand out?

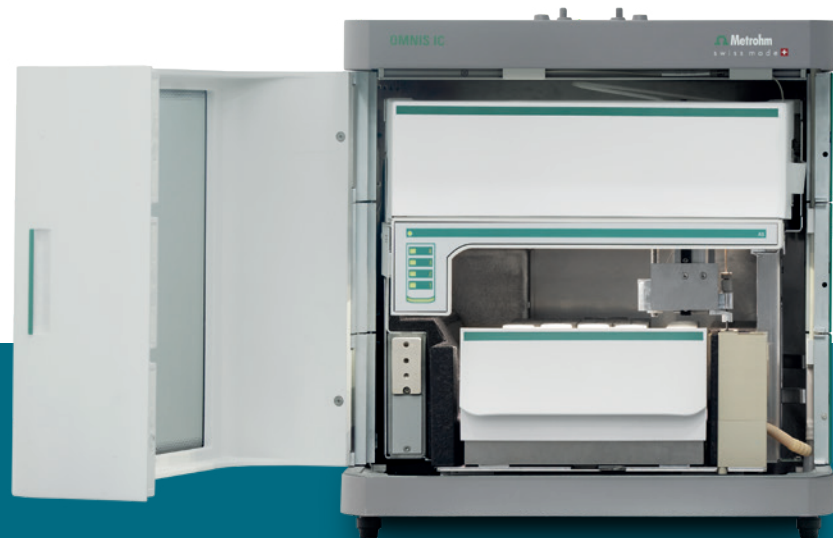
COMPARED TO CONVENTIONAL SYSTEMS, OMNIS IC AUTOMATION OFFERS:

- Maximum performance: High sample capacity, fast injection cycle time, and dual-channel analysis capabilities.
- Maximum safety: Vial detection, rack recognition, and leak sensors combined with high-purity vials ensure full sample integrity.
- Maximum flexibility: Dilution, switching valves, customized racks, and barcode scanner integration adapt to any workflow.
- Maximum usability: Pull-out tray, internal lighting, smart system feedback, and intuitive software make daily operation easy.
- Lowest carry over: The integrated rinse station provides for optimal rinsing of the sample needle at any time. Active needle washing by multiple solvents can be integrated seamlessly.
- Maximum cooling capacity allowing to cool the entire sample capacity of the OMNIS IC Autosampler COOL.
- Additional: Most accurate sample aspiration with Metrohm intelligent dosing solution.

KEY FEATURES

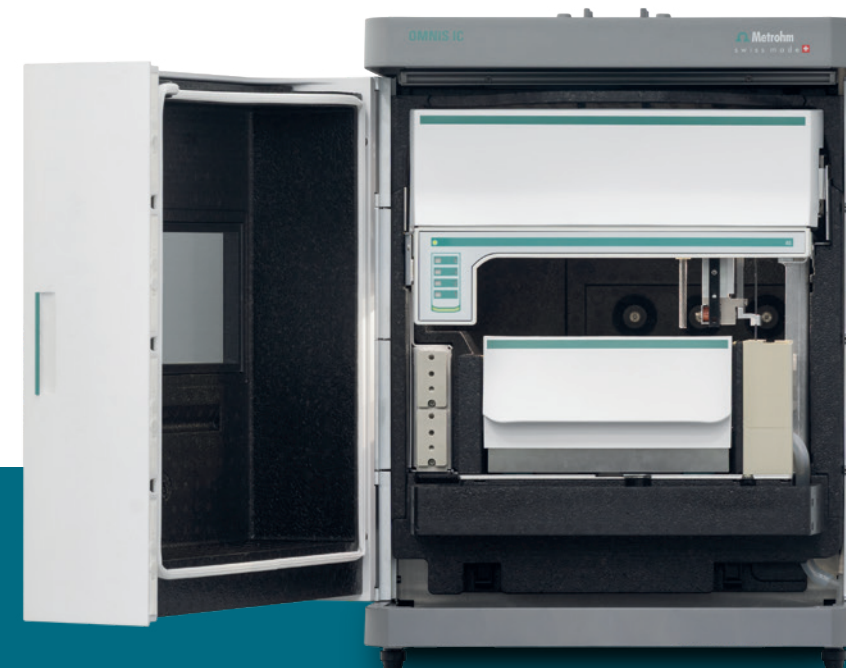
- Compact footprint: Can be placed directly underneath the OMNIS IC
- Temperature control: Adjustable from 4 °C to 22 °C
- High sample throughput: Accommodates up to 4 SBS racks (96 × 10 mL vials, 160 × 5 mL vials, 192 × HPLC vials (1500, 700, 300 µL), 4 × 386 Deepwell Plate)
- Pull-out tray for easy sample loading and unloading
- Fast and precise xyz needle drive with automatic vial recognition
- Follow-up light for visual tracking of needle movement and interior lighting
- LED status indicator for visual tracking of autosampler rack and tray status
- High flexibility for various sample vials and rack types (including customized racks)
- Six side pods for 50 mL bottles, e.g., for standards or rinsing solutions
- Integrated rinse station for close to zero carry over
- Leak detection for maximum safety
- Barcode recognition for secure tray and rack identification
- Switching valves for flexible and extended liquid handling
- Dilution station for precise dilution and homogenization

OMNIS IC Autosampler



The **OMNIS IC Autosampler** automates sample handling for up to 160 vials (5 mL) and supports a wide range of vial sizes – from 0.2 mL to 200 mL, including HPLC vials and well plates. The pull-out tray simplifies sample loading and unloading, while six side pods for 50 mL bottles allow convenient access to standards, check standards, and rinsing solutions.

OMNIS IC Autosampler COOL



For temperature sensitive samples, the **OMNIS IC Autosampler COOL** adds active cooling (4–22 °C) to the automation workflow. Ideal for biochemical and organic acid analyses, it ensures sample stability and accurate results. All features of the standard autosampler are included, making it the most versatile and reliable solution for demanding applications.



High-purity sample vials and versatile rack options – Designed for reliable IC results

Contaminants from polymer vials – such as leachable organic acids and inorganic ions – can compromise trace-level ion chromatography. Metrohm sample vials are produced and packed under certified cleanroom class 7 conditions (compliant with ISO 14644) and validated through rigorous impurity and leaching tests.

KEY FEATURES

- Guaranteed low contamination: < 1 µg/L for inorganic ions and < 5 µg/L for organic acids.
- Suitable for direct analysis and sensitive applications in the low µg/L range.
- Wide range of vial formats: PS vials (5 mL, 10 mL), PP bottles (50 mL) with matching Metrohm sample racks: 24 × 10 mL, 40 × 5 mL, and 6 × 50 mL.



Integrated inline sample preparation

Metrohm Inline Sample Preparation (MISP) transforms sample preparation from a manual bottleneck into a streamlined, fully automated procedure. Integrated directly into the OMNIS IC system, MISP supports techniques such as ultrafiltration, dilution, preconcentration, matrix elimination, dialysis, partial loop injection, and combinations of these. The hardware for these features is fixed on a tray that can be pulled out for easy access and maintenance.

KEY BENEFITS

- Time savings through reduced manual handling.
- Improved accuracy and reproducibility.
- Enhanced safety with protected components, flow monitoring, and leak detection.
- Superior reliability thanks to intuitive design and software integration.



OMNIS – One platform, multiple technologies

OMNIS is more than ion chromatography.
OMNIS is a universal platform that integrates also your titrations, near-infrared spectroscopy, and even third-party devices, e.g., laboratory balances.

This platform allows you to view and report results from multiple techniques in one consolidated overview, breaking down data silos and streamlining your routine analytics. Whether you're analyzing drinking water, food, or pharmaceutical samples, OMNIS ensures that results for conductivity, pH,

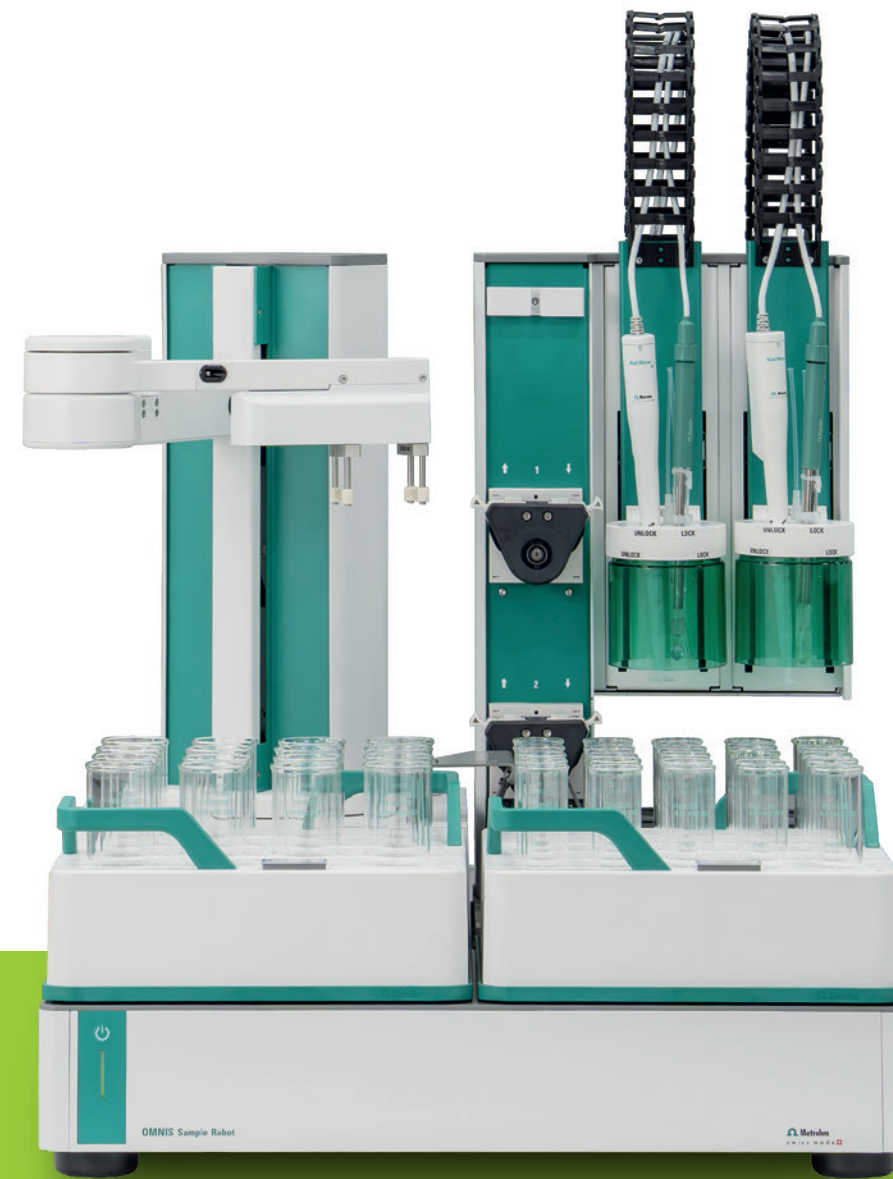
hardness, and ion concentrations are all captured and reported together. With intuitive menus, smart automation, and full traceability, OMNIS empowers labs to work faster, safer, and more efficiently – today and tomorrow.



OMNIS NIR Analyzer



OMNIS IC



OMNIS Sample Robot



OMNIS Titrator
with Dosing Module

Ordering information



OMNIS IC Systems	
2.1050.0020	OMNIS IC S COND/MSM/PP/CH
2.1050.0030	OMNIS IC S COND/MSM/MCS/PP/COL/DEG
2.1051.0020	OMNIS IC M COND/MSM/MCS/PP/DEG/DD/ROLC
2.1052.0020	OMNIS IC L 2COND/MSM/MCS/PP/DEG/DD/ROLC
2.1055.0020	OMNIS Extension Module
OMNIS IC Automation	
2.1054.0010	OMNIS IC Autosampler
2.1054.0020	OMNIS IC Autosampler COOL
6.02040.000	AS Tray
6.02040.010	AS Tray Cool
6.05801.110	Switching valve 3/2, UNF kit
6.05801.120	Switching valve 3/2, M6 kit
6.05801.130	Barcode scanner kit
6.05801.250	Dilution station kit
6.02041.500	OMNIS Sample Rack 24 x 10 mL
6.02041.510	OMNIS Sample Rack 40 x 5 mL
6.02041.520	OMNIS Sample Rack 48 x 11 mm
6.02041.530	OMNIS Sample Rack 6 x 50 mL
6.02041.540	OMNIS Sample Rack 12 x 22 mm
6.02041.550	OMNIS Sample Rack, 2 x 200 mL
6.02743.010	Vial PS, 10 mL, 2000 pieces
6.02743.020	Vial PS, 5 mL, 2000 pieces
6.02743.030	Bottle PP, 50 mL
6.02743.040	Bottle PP, 200 mL
6.02743.070	Cap PP, OD 16.6 mm, 2000 pieces
6.02743.080	Cap PP, OD 11.5 mm, 2000 pieces
6.02743.090	Screw cap with septum

OMNIS IC Modules and Units	
2.1050.0010	OMNIS IC S Module
2.1051.0010	OMNIS IC M Module
2.1052.0010	OMNIS IC L Module
2.1055.0020	OMNIS Extension Module
2.1056.0110	OMNIS Degasser Unit 1-Channel
2.1056.0120	OMNIS Degasser Unit 2-Channel
2.1056.0140	OMNIS Degasser Unit 4-Channel
2.1056.0210	OMNIS High-Pressure Pump Unit
2.1056.0310	OMNIS Dosing Drive Unit
2.1056.0410	OMNIS Actuator Unit
2.1056.0510	OMNIS Column Holder Unit
2.1056.0520	OMNIS Column Thermostat Unit 1
2.1056.0530	OMNIS Column Thermostat Unit 2
2.1056.0610	OMNIS MSM Unit
2.1056.0710	OMNIS MCS Unit
2.1056.0720	OMNIS MCS MB Unit
2.1056.0810	OMNIS Conductivity Detector Unit
2.1056.0910	OMNIS Multi Flow Monitor Unit
2.1056.0930	OMNIS Waste Collector Unit
2.1056.1010	Peristaltic Pump Unit 1-Channel
2.1056.1020	Peristaltic Pump Unit 2-Channel
2.1056.1110	OMNIS MISP Unit
2.1056.1200	OMNIS Reagent Organizer Liquid Control

OMNIS IC Cylinder Units	
6.01506.120	Cylinder unit OMNIS 2 mL, UNF 10/32
6.01506.150	Cylinder unit OMNIS 5 mL, UNF 10/32
6.01506.210	Cylinder unit OMNIS 10 mL, UNF 10/32
OMNIS IC Injectors and Selector	
6.05801.170	Injector 6/2 kit
6.05801.180	Injector 7/3 kit
6.05801.190	Injector 4/2, 0.25 µl kit
6.05801.200	Injector 4/2, 1.0 µl kit
6.05801.210	Injector 8/2 kit
6.05801.220	Injector 10/2 kit
6.05801.230	Selector 10/1, LP kit
6.05801.240	Selector 10/1, HP kit
Suppressor Rotors	
6.2832.000	MSM Rotor A
6.2842.000	MSM-HC Rotor A
6.2842.100	MSM-HC Rotor A, Hydroxide
6.2842.200	MSM-HC Rotor C
6.2844.000	MSM-LC Rotor A
OMNIS IC Equipment	
6.05331.010	OMNIS IC equip.: D-INJ, DD
6.05331.020	OMNIS IC equip.: D-INJ, PP
6.05331.030	OMNIS IC equip.: UF, PP/DD
6.05331.040	OMNIS IC equip.: MIDT
6.05331.050	OMNIS IC equip.: UF, PP/PP
6.05331.060	OMNIS IC equip.: MIDT-UF, PP/DD
6.05331.070	OMNIS IC equip.: MiPT
6.05331.080	OMNIS IC equip.: UF-MiPT, PP/DD
6.05331.090	OMNIS IC equip.: D-INJ, manually
6.05331.110	OMNIS IC equip.: Dialysis 2, PP/DD
6.05331.120	OMNIS IC equip.: MiPCT
6.05331.130	OMNIS IC equip.: MiPCT-ME

6.05332.000	OMNIS IC equip.: Container 10 L, LC
6.05332.010	OMNIS IC equip.: Container 10 L, drain
6.05332.020	OMNIS IC equip.: HPP piston seal wash, DD
6.05332.040	OMNIS IC equip.: PP Reg.
6.05332.050	OMNIS IC equip.: DD Reg.
6.05332.060	OMNIS IC equip.: Base plate
6.05332.070	OMNIS IC equip.: PCR, DD
6.05332.080	OMNIS IC equip.: EPOD
6.05332.090	OMNIS IC equip.: Dose-in Gradient
6.05332.100	OMNIS IC equip.: DD Reg., Rinse
6.05332.110	OMNIS IC equip.: PCR, PP
6.05332.120	OMNIS IC equip.: Two tower setup
6.05332.130	OMNIS IC equip.: AutoSwitch
6.05801.330	Mobile device holder kit
Software	
6.06002.010	Software license OMNIS 1x instrument license S/A
6.06002.110	Software license OMNIS 1x instrument license C/S
6.06004.010	Regulation/Compliance Stand Alone
6.06004.011	Software License Compliance/Regulation Client/Server
6.06004.020	Software license 3rd Party Data Integration Stand-Alone
6.06004.120	3rd Party Data Integration Client/Server
6.06004.060	OQ-FS OMNIS License
6.06004.050	Stand-Alone OMNIS Integrate
6.06004.200	OMNIS Stand-Alone Segmented Calibration
6.06004.300	OMNIS Client/Server Segmented Calibration



