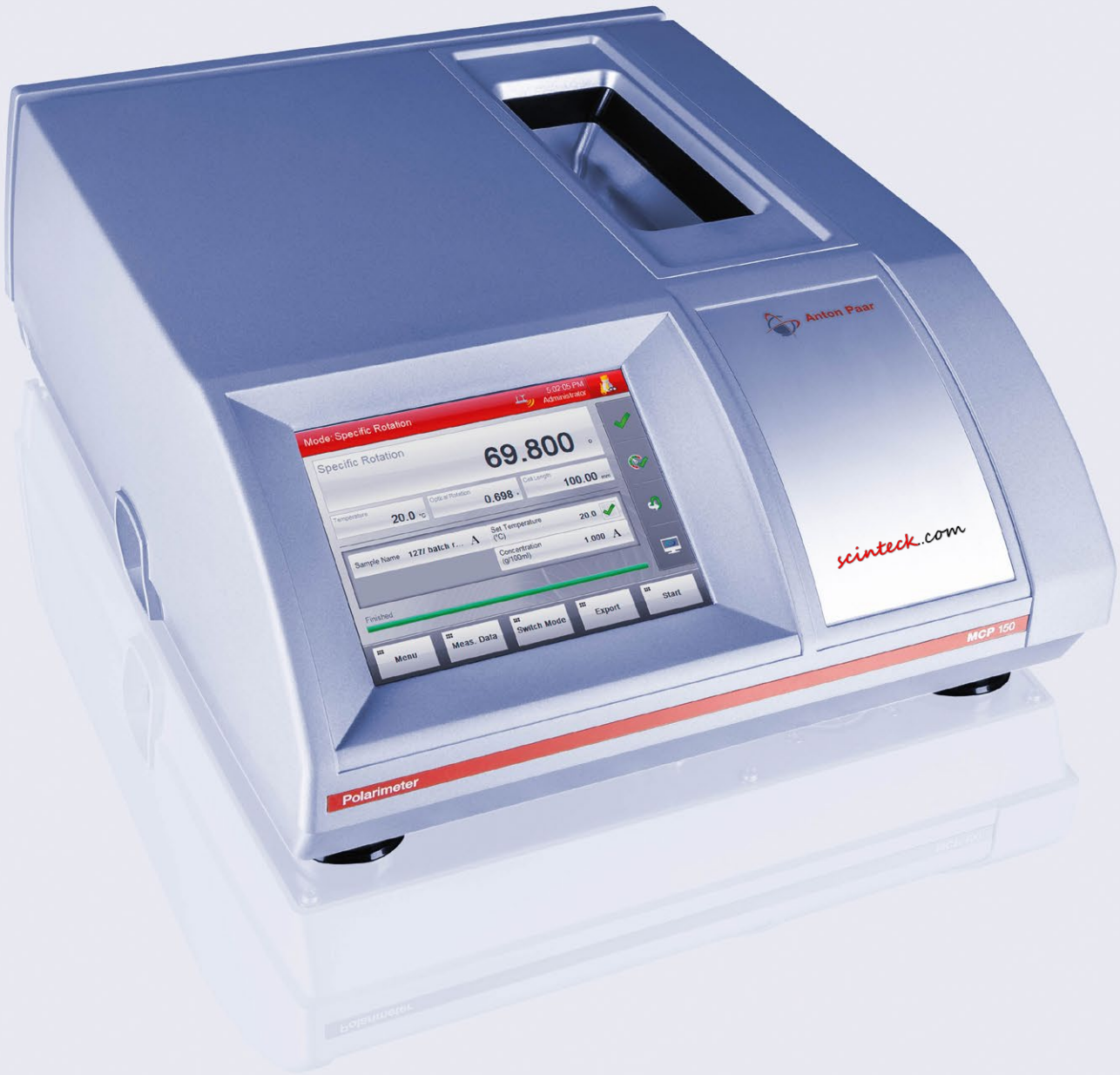
Scinteck Instruments

Anton Paar

Modular Compact Polarimeters

MCP 100
MCP 150



Efficiency by Design

You've always made sure that your optically active substances meet all quality standards. Of course, you want to keep your promise to your customers and meet all applicable standards in a fully traceable fashion.

Regulations in your field are constantly growing and requirements keep changing. That’s why most older polarimeters no longer give you the safety and traceability you need.

Anton Paar’s Modular Compact Polarimeters MCP 100 and MCP 150 help you meet all requirements at a truly budget-friendly price and with a small size for limited space on the lab bench.

THE MCP 100/150 SINGLE-WAVELENGTH POLARIMETERS ARE THE RIGHT CHOICE WHENEVER LABORATORY BENCH SPACE MATTERS. DUE TO THEIR SMALL SIZE, THE INSTRUMENTS ARE IDEAL FOR MULTIPARAMETER SETUP, E.G. IN COMBINATION WITH A REFRACTOMETER OR DENSITY METER.

MCP 100

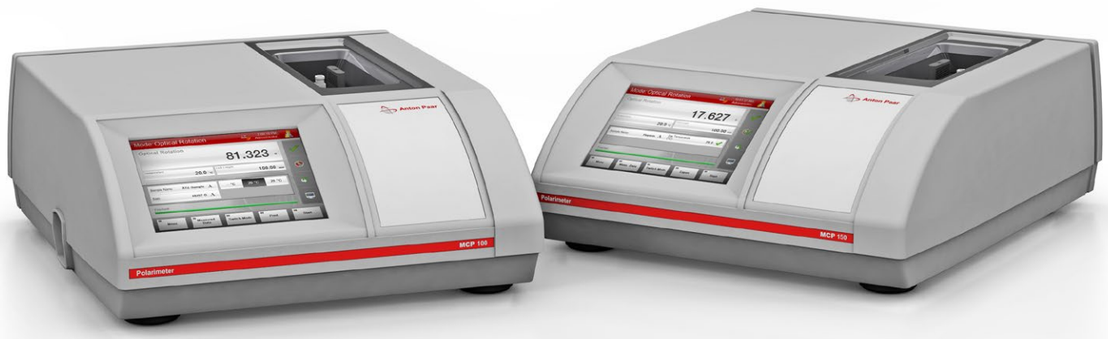
FOR ECONOMIC ROUTINE ANALYSIS

The instrument that fits in any laboratory and provides quick and easy operation for the analysis of chiral substances.

MCP 150

FOR SIMPLE ANALYSIS AND FULL PHARMA COMPLIANCE

The entry-level instrument for 21 CFR Part 11-compliant analysis.



scinteck.com

FIND OUT MORE

www.anton-paar.com/apb-mcp-100-150

READY TO MEASURE

MCP 100/150 REQUIRES LITTLE SPACE AND FITS INTO ANY LABORATORY

The instrument is easy to operate, and you get accurate results within seconds.

An internal data memory ensures that no data is lost. The measured data can be automatically exported to a connected printer or to a server via Ethernet.

RELIABLE

MCP 100/150 COMPLIES WITH ALL NATIONAL AND INTERNATIONAL PHARMACOPOEIAS

Different user hierarchies ensure that only authorized personnel operate the instrument. MCP 100/150’s Audit Trail function clearly and irrevocably documents every instrument interaction as required by, e.g. 21 CFR Part 11.

MCP 150 additionally offers a freely definable user group administration and an electronic signature to traceably sign the measured data. To minimize the time it takes to integrate your new MCP polarimeter into your workflow, Anton Paar offers a Pharma Qualification Package.

SAFE

MCP 100/150 CAN BE AUTOMATICALLY ADJUSTED AND CALIBRATED WITH TOOLMASTER™ QUARTZ CONTROL PLATES

All relevant parameters are securely transferred to the polarimeter. The result: seamless documentation, no data input errors, and full traceability. With the Peltier temperature control, the risk of measurement errors due to inaccurate sample temperature is eliminated.

Proven Technology –
Packed into a Space-Saving Polarimeter

Anton Paar's MCP 100/150 polarimeters ensure fast and reliable measurements with the most convenient operation. With their small size, MCP 100/150 polarimeters are the solution for limited space on the lab bench.

COMMUNICATION UNLIMITED

The MCP 100/150 communicates with other instruments. You can export data via USB, Ethernet, and RS232 interfaces with Anton Paar density meters/refractometers via Can bus.

OPERATING CONVENIENCE

The built-in color touchscreen is resistant to spillage and dirt. You can even operate the polarimeter when wearing gloves. For easy access, the USB ports are positioned on the side of the MCP 100/150 polarimeters.

FAST AND ACCURATE TEMPERATURE CONTROL

The powerful, automatic Peltier temperature control ensures a quick and homogenous temperature distribution in the cell and the sample. This means you receive fast and accurate results.

DURABILITY FOR A LONG LIFE

The LED light source guarantees 100,000 hours of operation. All parts of the polarimeter and the sample cells are resistant to aggressive chemicals.

INTELLIGENT SAMPLE CELLS AND QUARTZ PLATES

The wireless Toolmaster™ technology saves you time and prevents errors when changing sample cells and quartz control plates. Cell and quartz plate data as well as temperature values, controlled by the Peltier temperature control, are transferred quickly and securely into the instrument. This provides traceable documentation of the measurements.

DRUGS

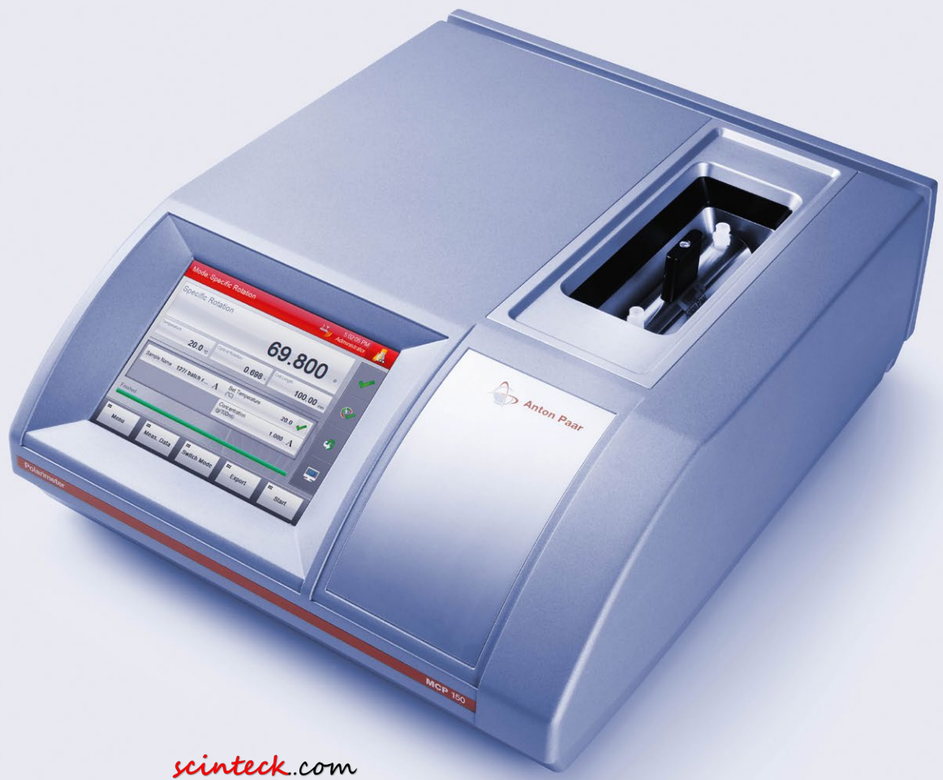
The MCP polarimeter can be used to ensure, e.g. proper enantiomer separation, to determine the concentrations of optically active substances, or to investigate correlations between toxicological and pharmacological properties and chirality. MCP meets the standards of international pharmacopoeias and provides full compliance with 21 CFR Part 11 according to the FDA.

FRAGRANCES

In perfume manufacturing, MCP polarimeters, in combination with DMA density meters and Abbemat refractometers, are used to carry out purity measurements on valuable essential oils and to ensure the constant quality of the perfumes.

FOOD AND FLAVORS

In food production, incoming raw materials and finished products are characterized and tested for purity with MCP polarimeters in combined setups with Abbemat refractometers.



ACCESSORIES: SIMPLIFY YOUR WORK

QUARTZ CONTROL PLATES WITH AUTOMATIC DETECTION: TOOLMASTER™ TECHNOLOGY

Using intelligent quartz plates with Toolmaster™ technology, calibration and adjustment of the polarimeter no longer require tables and manual data entry. The Toolmaster™ memory chip on the quartz control plate contains all the relevant calibration data, which is automatically transferred to the instrument.

Quartz control plates are solid reference standards for checking and adjusting the polarimeter. All quartz control plates comply with international standards (ICUMSA and OIML).

SAMPLE CELLS WITH AUTOMATIC DETECTION: TOOLMASTER™ TECHNOLOGY

Relevant parameters (e.g., path length, sample temperature) are transferred to the MCP software automatically to enable maximum traceability and easy handling.

Safe and quick wireless data transmission

- No handling of external temperature sensor required
- No cables and connectors

Cells with Luer filling port or filling funnel

- Range of cells, from standard stainless steel to Hastelloy
- Different path lengths from 2.5 mm to 100 mm
- Volumes from 0.7 mL to 10 mL

ASSISTANCE WITH QUALIFICATION AND VALIDATION

The MCP polarimeter software fully supports the requirements of the pharmaceutical industry, including GMP, 21 CFR Part 11 (MCP 150), GAMP 5, USP<1058>, and international pharmacopoeia (e.g., Ph. Eur., USP, JP). Anton Paar offers a Pharma Qualification and Validation Package that helps to integrate your new MCP into your workflow within a minimum period of time.

Anton Paar
Certified Service

“We’re confident in the high quality of our instruments. That’s why we provide **a full warranty for three years**.”

All new instruments* include repair for three years.
You avoid unforeseen costs and can always rely on your instrument.
Alongside the warranty, we offer a wide range of additional services and maintenance options.

*Due to the technology they use, some instruments require maintenance according to a maintenance schedule. Complying with the maintenance schedule is a prerequisite for the three-year warranty.

	MCP 100	MCP 150
SPECIFICATIONS		
Measuring scales	°Optical rotation, % concentration (g/100 mL, g/L, g/100 cm³, kg/m³), specific rotation	°Optical rotation, % concentration (g/100 mL, g/L, g/100 cm³, kg/m³), specific rotation, customizable scales
Measuring range	±89.9°	
Resolution	0.001°	
Accuracy	±0.01°	±0.004°
Repeatability	±0.01°	±0.004°
Wavelength	589 nm	
Light source	LED	
Sensitivity	Optical density (OD) 2.0	
TEMPERATURE CONTROL AND MEASUREMENT		
Sensor	Pt100 sensor for sample temperature measurement inside the cell or quartz control plate; wireless transfer to the instrument	
Resolution	0.1 °C	0.1 °C
Accuracy**	±0.2 °C	±0.1 °C
Temperature control range***	20 °C and 25 °C	15 °C* to 35 °C
DIMENSIONS, POWER REQUIREMENTS, INTERFACES		
Dimensions (L x W x H)	370 mm x 320 mm x 130 mm	
Weight	8.6 kg	
Power management	Self-adapting to any mains voltage, 100 to 240 VAC, 50/60 Hz	
Power consumption	Typ. 70 VA, max. 120 VA	
Interfaces	USB, RS232, Ethernet, CAN bus; easy connection of keyboard, mouse, printer, bar code reader, and networks	
ACCESSORIES		
Sample cells	Sample cells from 2.5 mm to 100 mm with wireless temperature measurement	
Quartz control plates	Automatic identification of the quartz control plate and automated wireless transfer of reference parameters into the instrument	

* Under physical standard conditions
** With Peltier module and Toolmaster™ sample cell (50/100 mm)
*** The temperature control at 10 °C is under physical standard conditions

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