

# gonotec

## Chloridmeter

### Advantages of Gonotec CM20 chloride meter:

Minimum  
sample volumes

Perfect for  
determination of  
sweat samples

Simple operation  
and handling

Automatic  
measuring

Fast operational  
readiness

IVD-control  
standard in  
OPC-ampoules

Barcode and USB  
connectivity



## Special Application - Cystic Fibrosis

- Only small amounts of sweat are needed
- Ready-to-use electrolyte (acid buffer and stabilization additive); complies with IVD
- Required electrolyte replacement is indicated
- Required electrode cleaning is indicated (frequent source of error)
- Reference solution 100mmol/l; complies with IVD
- GMP-compliant (Rili-Bäk, MPG) qualification and validation in hospitals and cystic fibrosis clinics

## Other Applications

The system is used both in medical laboratory diagnostics and in industry.

- Chloride determination in serum, urine, sweat or other body fluids
- Examination of food products for quality control purposes
- Water analysis of service water and wastewater
- Agricultural and ecological examinations for determination of salt content in soils
- Building material analysis in the production of cement and plaster
- Quality control in the chemical industry, e.g. in the production of fixing and developing baths
- Production control in the preparation of antibiotics and other pharmaceutical products
- Examination of the salt content of drilling muds in the mineral oil industry

## Automated Measurement Process

The measurement principle is based on coulometric impulse titration as an absolute measurement method. Through automated sample recognition, the measurement proceeds fully automatically after the sample is inserted without the need for manual confirmation by the user.

The end of the titration is determined by the measurement electrodes, which permanently determine the conductivity of the solution. This allows the CM20 chloride meter to be operated quickly and easily without the need for many years of experience in the classic chloride determination method. If the chloride ion concentration is very low, it is possible to raise the concentration using the standard solution.

## Simple Handling and Documentation

- The CM20 chloride meter can be controlled easily and comfortably via a touch screen display.
- The results are sent to the optional built-in printer in document-ready format.
- A PC for data transfer can be connected via USB or RS232.
- The last results remain available for reading even after automatic switching to stand-by mode.
- The robust design of the measurement equipment makes the CM20 chloride meter easy to handle and maintain.
- Through the use of microprocessor controls, the user does not need to correct the factory-side calibration.

## Specifications

### Standard Equipment

Sample volume	20 µl
Duration of measurement	Approx. 20 seconds at 100 mmol/l
Reproducibility	± 2 digits (20 µl) at 100 mmol/l
Measurement display	0 - 999 mmol/l
Measurement range	10 - 999 mmol/l
Resolution	1 mmol/l over the entire measurement range
Integrated stirring	Magnetic stir bar PTFE, cylindrical
Ambient temperature	10-35 °C
Digital data interface	2 x RS232, 1 x USB
Power source	220 V (± 30V), 50/60 Hz, 40 VA, special models 110V, 100V
Dimensions	220 x 205 x 360 mm (L x W x H)
Weight	Approx. 5.7 kg

### Option M

Sample volume	10 µl
Clinical measuring range	10 - 160 mmol/l
Reproducibility	± 1 digits (10 µl) at 100 mmol/l

### Option D

Printer	Graphical dot matrix printer, date, time and sample information on each measurement
Digits	≥ 16 characters per row
Paper	Normal paper, 43 mm wide
Print modes	Single printing, batch printing
Error reporting	Printed in plain text

### Accessories

Digital Input	Barcode reader for reading data
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Technical data subject to change without notice.

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