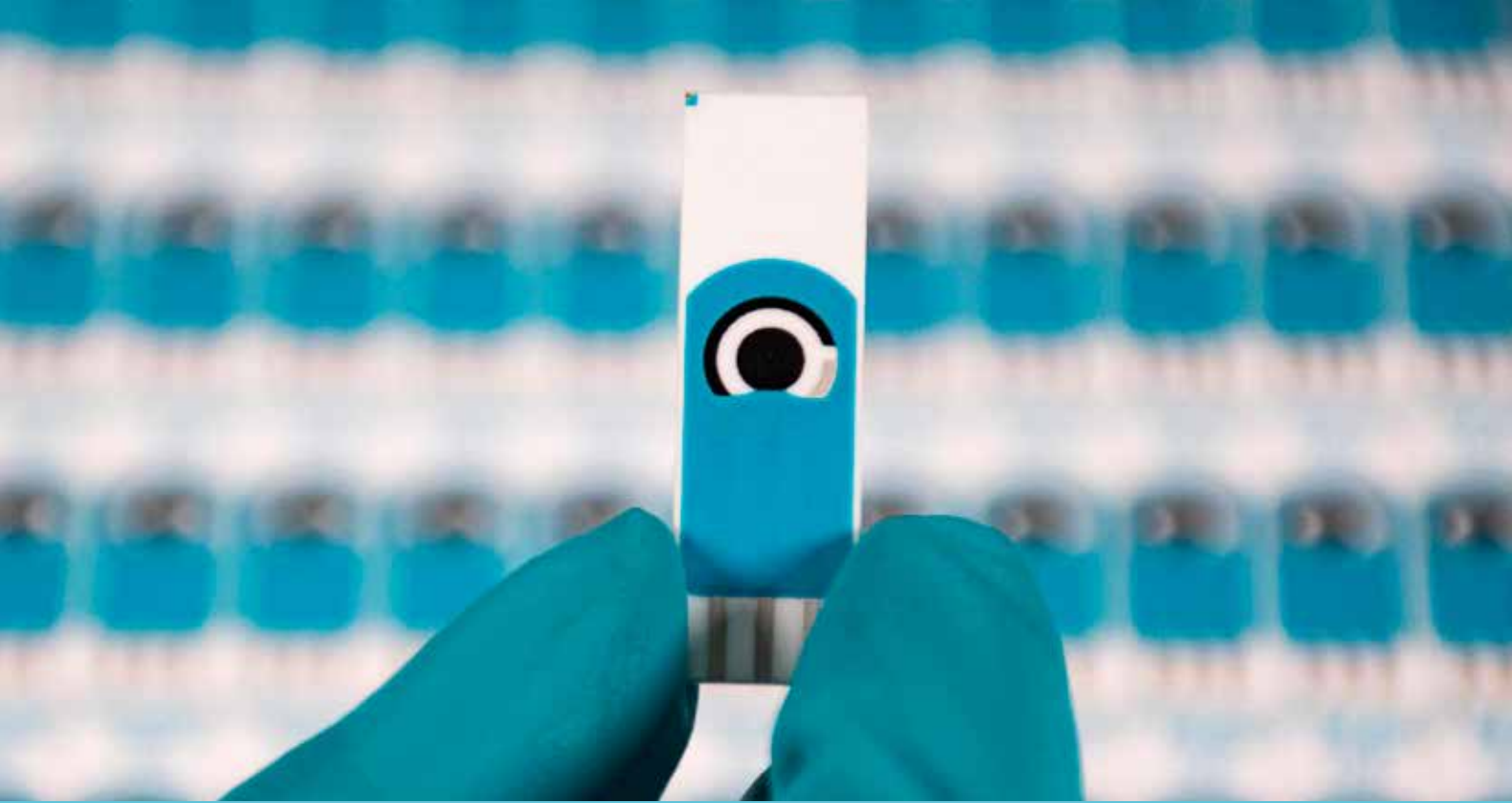




Dream of your sensor and together we will make it true

Custom production and high volume manufacturing of electrochemical solutions

FAQ DOCUMENT HIGHLIGHTS

- Timing
- Process capabilities
- Production volumes
- Price-performance ratio
- Ordering information

**PEOPLE
YOU
CAN
TRUST**



 **Metrohm**

Frequently asked questions

If you are thinking of reaching the market with a certified and best-in-class electrochemical solution, you can make true your project by partnering with Metrohm.

Achieve a customized and high-volume production that meets the highest quality standards without risking supply shortages. Get full service, from prototyping to mass production, at a good price-performance ratio. Below is a list of frequently asked questions you may have about this service.

TIMING

> How long does it take to produce a customized product?

From the time the order is placed until production is ready, the estimated lead time is six to ten weeks.

This process is customized at all scales, from the conception of the production to its preparation for shipment. To this end, we study the best solutions and the most suitable manufacturing technology and procedures in each case. Therefore, lead times can vary and will be defined and agreed upon according to the specific design and volume requested.

PROCESS CAPABILITIES

> Which substrates can be used to develop these sensing solutions?

We work with various substrate materials such as: ceramic; plastic (opaque or transparent) or PCB; to name a few. Each case is evaluated to find the best substrate to suit your needs.

> What electrode materials can be chosen?

A wide range of materials are available: carbon; silver; silver chloride; gold; low temperature gold; platinum; palladium; ITO; PEDOT; transparent carbon; transparent gold; carbon modified with: electrochemical mediators, nanomaterials, biomaterials and

particles; copper; bismuth; nickel or steel, among others. It's also possible for us to manufacture electrochemical solutions with a customer's own specific materials

> If the design of an electrochemical solution has small-scale elements, what are the minimum dimensions used for manufacturing?

Metrohm DropSens manufacturing allows production from scales of about 30 μm , but each individual case will have to be studied on a case-by-case basis. To carry out the production of a solution, several factors need to be considered for manufacturing: the specific design; the substrate; or the materials chosen.

PRODUCTION VOLUMES

> Is it possible to place a large volume order (of many units)?

Metrohm DropSens can supply large-volume orders without the risk of stockouts. Production is guaranteed whether a single order is placed or multiple deliveries are required over time. We can also produce orders with small unit volumes.

PRICE-PERFORMANCE RATIO

> Is it possible to optimize the price of production?

Specific requirements will be studied in-depth and advice will be given on the most cost-effective possibilities for the design. It should be noted that, apart from the technical aspects, prices are based on the volume of orders, so the price decreases as the volume of orders increases.



ORDERING INFORMATION

In order for us to evaluate your requirements, you will need to complete a detailed questionnaire, fill out a contact form and attach a rough sketch of your design including all dimensions. (If a confidentiality agreement is required, we can provide you with a standard template). More information and documentation can be found here: http://www.dropsens.com/en/your_electrochemical_sensor.html

You can also contact the distributor in your country or use the following email to get in touch: info.dropsens@metrohm.com

