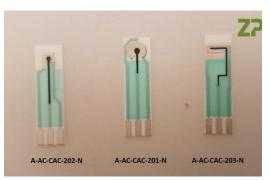


eSensor Manufacturing and Technology

# Technical Datasheet: Economy electrochemical sensors/biosensors

## **Product description**

The Z&P sensors provide a guick and accurate way of determining concentrations of bio-relevant molecules. They can be delivered with chemically modified surfaces for plugand-play chemical monitoring, or they can serve as a robust architecture for your research team's specific chemical modification. Their screen-printed nature allows for a wide selection of electrode materials and excellent reproducibility. The dimensions of the economy sensors provide a platform which lowers manufacturing costs while maintaining a handleable format. The third electrode double as counter or fill electrode, depending on the application.



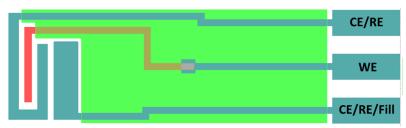
## **Key features**

- Reusable
- High sensitivity
- Quick response
- Wide range of analytes (with the option of custom made)
- A variety of electrode configurations
- Different electrode materials
- Different electrode geometries
- Compatible with 2.54 mm pitch edge connectors

## **SPECIFICATIONS**

#### **Mechanical dimensions**

L = 25.4 mm, W = 7 mm, T = 0.625 mm



Dimensions of C-ADGG-101-N sensor. All dimensions are in micrometers.

#### **Storage Conditions**

Temperature
Lighting
Physical protection
Expiration
Humidity

## Sensor response and conditions

	Glucose	Lactate	Oxygen	Hydrogen peroxide		
Range	2 – 40 mM	0.5 – 4 mM	0 – 6 ppm	1 – 520 μM		
Settle time	1.5 min	1.5 min	3 min	<1 min		
Beaker testing	✓	✓	✓	✓		
Drop test	✓	✓	✓	✓		
Flow mode	✓	✓	✓	✓		

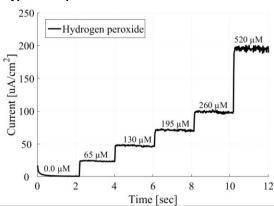
## With modified surface

4-8 C° Away from light In container Use before 3 months 50% RH ± 20% RH

#### **Bare electrodes**

Room temperature Away from light In container Use within two years 50% RH ± 20% RH

## Typical response



## **ORDERING CODE**

AC - Silver/Silver



1		2	3	4		5		6		7	
Α	-	AC	Р	AC	-	203	-	Ν	-	Ν	

1. Substrate material: A – Alumina 625 µm 2. Reference electrode

> material: Chloride P – Platinum

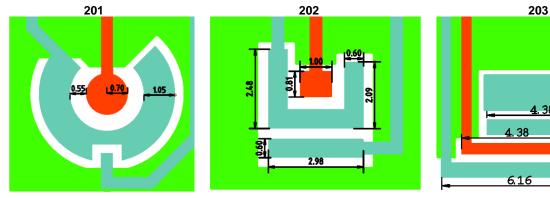
4. Counter/fill electrode 3. Working electrode material: G - Gold AC - Silver/Silver

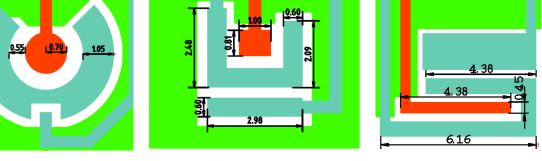
P - Platinum material: G – Gold C - Carbon P – Platinum C - Carbon

201 - Disk

5. Electrode geometry: 202 - Disk with spill barrier/dispensing cradle and strictly planar diffusion

203 - Reduced working electrode





6. Target analyte: N - None (Bare, unmodified electrode)

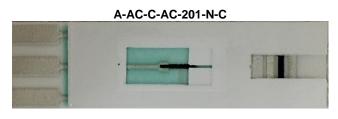
G - Glucose L - Lactate O - Oxygen

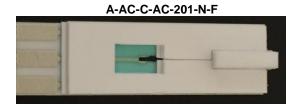
H - Hydrogen Peroxide K - Nitric Oxide

P - Potassium

7. Capillary fill N - None (No capillary fil)

C - Capillary fill, no filter F - Capillary fill with PE filter





## **CUSTOMIZABILITY**

Zimmer and Peacock can also make customized sensors with the option to target other analytes than those listed in this datasheet, tailored electrode configuration and geometry, and other materials. Please contact us through the contact form on zimmerpeacock.com or by e-mail on sales@zimmerpeacock.com