

## ELECTROCHEMICAL SENSOR

Type: AC7.W\*.R\*

### Description:

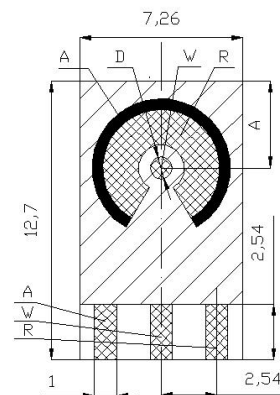
The sensor is formed on a corundum ceramic base. On to this surface the working, the reference and the auxiliary electrodes are applied. The electrodes are made of variety of materials (see below). At the end of the sensor there is a contacting field which is connected with the active part by the silver conducting paths which are covered by a dielectric protection layer. A bio-chemically active substance is put on the working electrode of the sensor.

### Physical Parameters:

#### Dimensions:

Weight: 0.2 gms  
 Length: 12.70 mm  
 Width: 7.26 mm  
 Thickness: 0.63 mm

A	4.0 ± 0.05 mm
D	1.00 ± 0.05 mm



Electrode Materials are defined by:

AC7.W\*.R\*

The asterisk is replaced by the appropriate number or letter.

A - Amperometric sensor or electrode	3 - Pure Silver
C - Corundum ceramic base	4 - Graphite
7 - Sensor group reference number	R - Reference electrode material
W - Working electrode material	S - Silver
S - Alloy of Gold and Platinum	1 - Silver / Silver Chloride
1 - Pure Gold	2 - Silver covered by AgCl
2 - Pure Platinum	

### Sensor Usage:

This specific range of AC1 sensors enable the measurement of:

- Basic electrochemical and bio-electrochemical techniques
- H<sub>2</sub>O<sub>2</sub> concentration
- Glucose
- Ferricyanide
- Toxicity caused by pesticides
- Enzyme activity
- Enzyme activity and Michaelis Menten constant

### Evaluating Units:

- BA1.\*
- BA2.\*

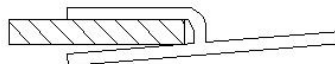
### Experimental Accessories:

- Flow Through Adapter
- Peristaltic Pump PP and Linear Pump
- Glass vessel TC1
- Thermostat TK-1 (there is model that allows thermostating TC1 cell)

### Connector Types for AC7 Sensor

#### Range:

- Soldered pins



### Software Packs:

These are available for

- Basic evaluation
- Measurement of enzyme activity and Michaelis Menten constant X

### Ordering information:

- The order is specified by whole sensor description formula
- Minimum order quantity - 25 sensors
- All order quantities are to be in multiples of 25 e.g. 25, 50, 75, etc.
- Delivery time for standard AC7 sensors is 4 weeks from receipt of order
- Delivery time for non-standard AC7 sensors depends on final technical specification of order

### Examples of Order:

- 100 pieces - AC7.W2.R1

### The explicit list of materials used for electrode preparation

Type of Sensor	Electrode Material			Conducting Paths
	Working	Reference	Auxiliary	
AC7.WS.RS	PtAu (15 / 85%)	AgPd (98 / 2%)	PtAu (15 / 85%)	Ag
AC7.WS.R1	PtAu (15 / 85%)	Ag / AgCl (60 / 40%)	PtAu (15 / 85%)	Ag
AC7.WS.R2	PtAu (15 / 85%)	Chlorinated Silver	PtAu (15 / 85%)	Ag
AC7.W1.RS	AuPd (98 / 2%)	AgPd (98 / 2%)	AuPd (98 / 2%)	Ag
AC7.W1.R1	AuPd (98 / 2%)	Ag / AgCl (60 / 40%)	AuPd (98 / 2%)	Ag
AC7.W1.R2	AuPd (98 / 2%)	Chlorinated Silver	AuPd (98 / 2%)	Ag
AC7.W2.RS	Pt (100%)	AgPd (98 / 2%)	Pt (100%)	Ag
AC7.W2.R1	Pt (100%)	Ag / AgCl (60 / 40%)	Pt (100%)	Ag
AC7.W2.R2	Pt (100%)	Chlorinated Silver	Pt (100%)	Ag
AC7.W3.RS	AgPd (98 / 2%)	AgPd (98 / 2%)	AuPd (98 / 2%)	Ag
AC7.W3.R1	AgPd (98 / 2%)	Ag / AgCl (60 / 40%)	AuPd (98 / 2%)	Ag
AC7.W3.R2	AgPd (98 / 2%)	Chlorinated Silver	AuPd (98 / 2%)	Ag
AC7.W4.RS	C (7101)	AgPd (98 / 2%)	PtAu (15 / 85%)	Ag
AC7.W4.R1	C (7101)	Ag / AgCl (60 / 40%)	PtAu (15 / 85%)	Ag
AC7.W4.R2	C (7101)	Chlorinated Silver	PtAu (15 / 85%)	Ag