



Product Specification

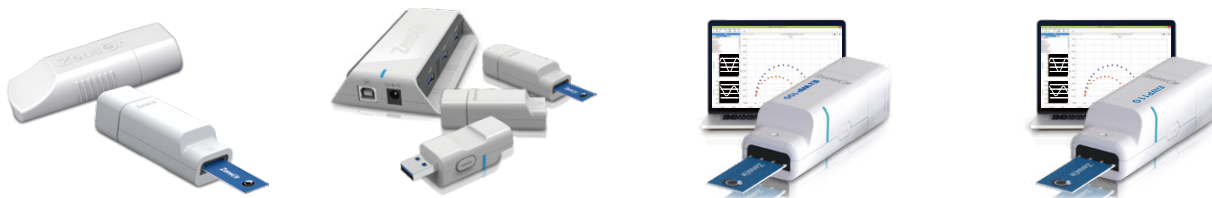


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Wireless Potentiostat



ECWP100single	ECWP100plus	EIWP100	EIWP110
Wireless	Wireless	Wireless	Wireless
Simulator	Simulator	Simulator	Simulator
SPE available	SPE available	SPE available	SPE available
3 clips connector available	3 clips connector available	3 clips connector available	3 clips connector available
single channel	Maximum 8 channels	single channel	single channel
Need PC	Need PC	Need PC	Need PC
CV/LSV/SWW/DPV/IT/P-IT/OCP	CV/LSV/SWW/DPV/IT/P-IT/OCP	CV	CV/LSV/SWW/DPV/IT/P-IT/OCP
-	-	EIS 0.2Hz - 200kHz	EIS 0.2Hz - 200kHz
-	-	IMPT	IMPT
-	-	IMPE	IMPE
+2~-2 V (OCP: +1.8~-1.8 V)	+2~-2 V (OCP: +1.8~-1.8 V)	+2~-2 V	+2~-2 V (OCP: +1.8~-1.8 V)
5E-3 ~ 1E-9 A	5E-3 ~ 1E-9 A	5E-3 ~ 1E-9 A	5E-3 ~ 1E-9 A

Handheld Potentiostat



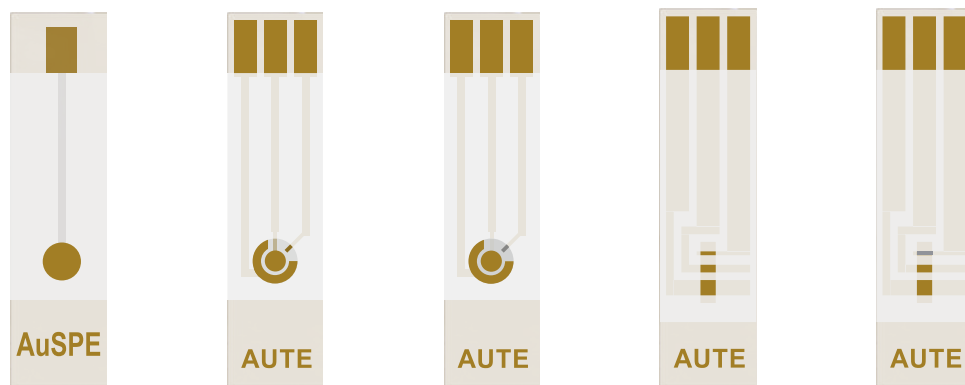
ECAS100	ACIP100
USB and battery powered + Offline use	USB and battery powered + Offline use
Simulator (editable chip)	Simulator (editable chip)
SPE available	SPE available
3 clips connector available	3 clips connector available
Single-channel	Single-channel
5.0 touch panel	5.0 touch panel
CV/LSV/SWW/DPV/IT/OCP	CV/IT/OCP
-	EIS 0.01~1KHz
-	IMPT
-	IMPE
+2~-2 V	+2~-2 V
1E-2 ~ 1E-10 A	1E-2 ~ 1E-10 A

Multi-Channel Potentiostat



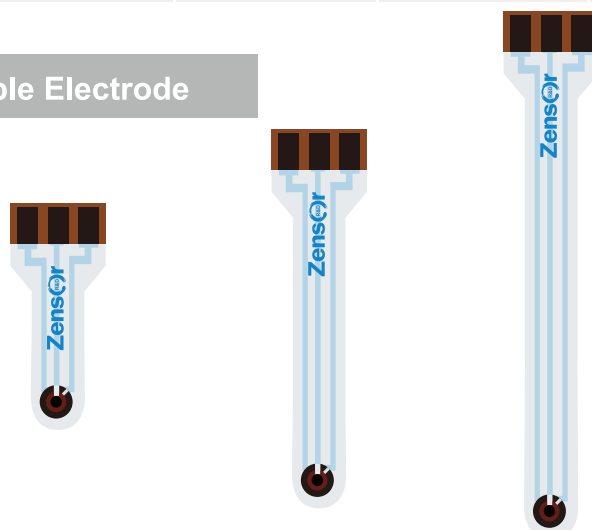
MCP100
USB powered
-
SPE available
3 clips connector available
Maximum 10 channels
Need PC
CV/IT/OCP
-
-
-
+2~-2 V
1E-2 ~ 1E-10 A

Sputtered Gold / Metal Disposable Electrode



Model	AUSE100	AUTE100	AUTE100AgCl	AUTE200	AUTE200AgCl
Electrode system	single electrode	3 electrodes	3 electrodes	3 electrodes	3 electrodes
Base plate	PC	PC	PC	PC	PC
Size of base plate (mm*mm)	12.6*50	12.6*50	12.6*50	12.6*50	12.6*50
Material of WE	Gold	Gold	Gold	Gold	Gold
Size of WE	D=5 mm	D=3 mm	D=3 mm	2*1 mm	2*1 mm
Area of WE (mm ²)	19.6	7.1	7.1	2.0	2.0
Material of RE	-	Gold	Ag/AgCl Pseudo	Gold	Ag/AgCl Pseudo
Area of RE (mm ²)	-	0.5	0.5	1.0	1.0
Material of CE	-	Gold	Gold	Gold	Gold
Area of CE (mm ²)	-	10.6	10.6	4.0	4.0

Carbon SPE / Flexible Electrode



Model	FTE100	FTE200	FTE300
Electrode system	3 electrodes	3 electrodes	3 electrodes
Base plate	PI	PI	PI
Size of base plate (mm*mm)	12.6/6*30	12.6/6*50	12.6/6*70
Material of WE	Carbon	Carbon	Carbon
Size of WE	D=1.0 mm	D=1.0 mm	D=1.0 mm
Area of WE (mm ²)	0.79	0.79	0.79
Material of RE	Ag Pseudo	Ag Pseudo	Ag Pseudo
Area of RE (mm ²)	0.2	0.2	0.2
Material of CE	Carbon	Carbon	Carbon
Area of CE (mm ²)	3.05	3.05	3.05

Cable ECC100 for all Zensor electrode



Carbon SPE / Single Electrode



Ag SPE / Single Electrode



Model	SE100	SE101	SE102	Ag100
Electrode system	single electrode	single electrode	single electrode	single electrode
Base plate	PP	PP	PP	PP
Size of base plate (mm*mm)	12.6*50	12.6*50	12.6*50	12.6*50
Material of WE	Carbon	Carbon	Carbon	Ag
Size of WE	D=5 mm	D=3 mm	D=1.5 mm	D=5 mm
Area of WE (mm ²)	19.6	7.1	1.8	19.6
Material of RE	-	-	-	-
Area of RE (mm ²)	-	-	-	-
Material of CE	-	-	-	-
Area of CE (mm ²)	-	-	-	-

Carbon SPE / Three Electrode



Model	TE100	TE100AgCl	TE200	TE300	GTE100 (Organic solvents available)
Electrode system	3 electrodes	3 electrodes	3 electrodes	3 electrodes	3 electrodes
Base plate	PP	PP	PP	PP	Al ₂ O ₃
Size of base plate (mm*mm)	12.6*50	12.6*50	12.6*50	12.6*30	12.6*30
Material of WE	Carbon	Carbon	Carbon	Carbon	Glassy Carbon
Size of WE	D=3 mm	D=3 mm	2*1 mm	D=3 mm	D=3 mm
Area of WE (mm ²)	7.1	7.1	2.0	7.1	7.1
Material of RE	Ag Pseudo	Ag/AgCl Pseudo	Ag Pseudo	Ag Pseudo	Ag/AgCl Pseudo
Area of RE (mm ²)	0.3	0.3	1.0	0.3	0.1
Material of CE	Carbon	Carbon	Carbon	Carbon	Glassy Carbon
Area of CE (mm ²)	10.6	10.6	4.0	10.6	10.0

Cyclic Voltammetry (CV)

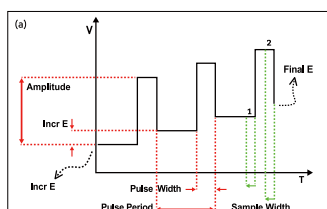
Parameters	Range	Description
Init E (mV)	-2000 – +2000	Initial potential
High E (mV)	-2000 – +2000	High limit of potential scan
Low E (mV)	-2000 – +2000	Low limit of potential scan
Initial Scan (mV/Sec)	Negative or Positive	Direction of Initial scan
Scan Rate (mV/Sec)	1 – 5000	Potential scan rate
Sweep Segments	1 – 10000	Each segment is half cycle
Sample interval (mV)	1 – 200	Data sample interval
Quiet Time (sec)	0 – 10000	Quiet time before scan
Sensitivity (A/V)	Per model	Sensitivity scale
Pre-condition		
Potential (mV)	-2000 – +2000	Pre-treatment potential
Time (sec)	0 – 10000	Pre-treatment time

Open Circuit Potential (OCP)

Parameters	Range	Description
Running Time (sec)	0.1 – 100000	Measurement time
Sample interval (ms)	1 – 3000	Sampling interval
High E Limit (mV)	Per model	High potential limit
Low E Limit (mV)	Per model	Low potential limit
ScaleY lock		Lock Y axis as E limits
Quiet time (sec)	0 – 10000	Quiet time before scan

Differential Pulse Voltammetry (DPV)

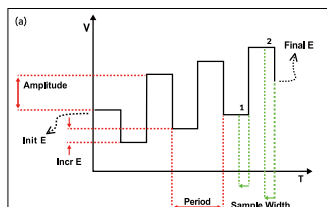
The concept diagram of Differential Pulse Voltammetry



Parameters	Range	Description
Init E (mV)	-2000 - +2000	Initial potential
Final E (mV)	-2000 - +2000	Final potential
Incr E (mV)	1 – 1000	Increment potential
Amplitude (mV)	5 – 1000	Potential pulse amplitude
Pulse Width (ms)	4 – 400	Potential pulse width
Sample Width (ms)	1 – <pulse width	Data sampling width
Pulse Period (ms)	10 – 1000	Potential pulse period
Quiet time (sec)	0 – 10000	Quiet time before scan
Sensitivity (A/V)	Per model	Sensitivity scale
Pre-condition		
Potential (mV)	-2000 – +2000	Pre-treatment potential
Time (sec)	0 – 10000	Pre-treatment time

Square Wave Voltammetry (SWV)

The concept diagram of Square Wave Voltammetry



Parameters	Range	Description
Init E (mV)	-2000 – +2000	Initial potential
Final E (mV)	-2000 – +2000	Final potential
Incr E (mV)	1 – 1000	Increment potential
Amplitude (mV)	5 – 1000	Potential pulse amplitude
Period (ms)	10 – 1000	Time for a wave unit
Sample Width (ms)	1 – <Period/2	Data sampling width
Quiet time (sec)	0 – 10000	Quiet time before scan
Sensitivity (A/V)	Per model	Sensitivity scale
Pre-condition		
Potential (mV)	-2000 – +2000	Pre-treatment potential
Time (sec)	0 – 10000	Pre-treatment time

Linear Sweep Voltammetry (LSV)

Parameters	Range	Description
Init E (mV)	-2000 - +2000	Initial potential
Final E (mV)	-2000 - +2000	Final potential
Scan Rate (mV/Sec)	1 – 5000	Potential scan rate
Sample interval (mV)	1 – 200	Data sample interval
Quiet Time (sec)	0 – 10000	Quiet time before scan
Sweep Segments	1 – 10000	Each segment is half cycle
Sensitivity (A/V)	Per model	Sensitivity scale
Pre-condition		
Potential (mV)	-2000 – +2000	Pre-treatment potential
Time (sec)	0 – 10000	Pre-treatment time

Amperometry (IT Curve)

Parameters	Range	Description
Init E (mV)	-2000 – +2000	Initial potential
Sample interval (ms)	1 – 3000	Data sample interval
Running Time (sec)	0.1 – 1250000	Measurement time
Quiet time (sec)	0 – 10000	Quiet time before scan
I Scale Mode	1, 2, 3	3 display way of sensitivity
Sensitivity (A/V)	Per model	Sensitivity scale
ScaleY lock		Lock Y axis as selected Sensitivity
Pre-condition		
Potential (mV)	-2000 – +2000	Pre-treatment potential
Time (sec)	0 – 10000	Pre-treatment time

Pulsed Amperometry (Pulsed IT Curve)

Parameters	Range	Description
Init E (mV)	-2000 – +2000	Initial potential
Init Time (ms)	5 – 10000	Time for Initial potential
Pulsed E (mV)	-2000 – +2000	Pulsed potential
E Change Time (sec)	0 – 100	Time for reaching Pulsed E
Pulsed Time (ms)	5 – 10000	Time for Pulsed potential
Sample interval (ms)	1 – 3000	Data sample interval
Running Time (sec)	0.1– 1250000	Measurement time
Quiet time (sec)	0 – 10000	Quiet time before scan
Sensitivity (A/V)	1e-9 –5e-3	Sensitivity scale
Pre-condition		
Potential (mV)	-2000 – +2000	Pre-treatment potential
Time (sec)	0 – 10000	Pre-treatment time

Electrochemical Impedance Spectroscopy (EIS)

Parameters	Range	Description
Init E (mV)	(Initial E + Amplitude ≤ 2000	Initial potential
Amplitude (mV)	1 – 500	Sinusoidal amplitude
High Freq. (Hz)	Per model	Maximum Frequency
Low Freq. (Hz)	Per model	Minimum Frequency
Sample points	1 – 10	Number of points per decade frequency
Quiet time (sec)	0 – 10000	Quiet time before scan

Impedance–Time

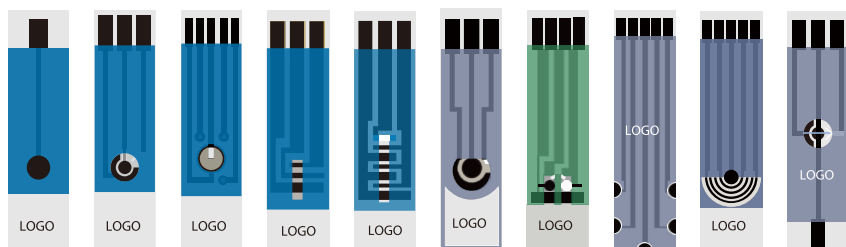
Parameters	Range	Description
Init E (mV)	(Initial E + Amplitude ≤ 2000	Initial potential
Amplitude (mV)	1 – 500	Sinusoidal amplitude
Freq. (Hz)	Per model	Sinusoidal Frequency
Sample interval (sec)	0.5 – <run time	Data sample interval
Run time (sec)	30 – 100000	Measurement time
Quiet time (sec)	0 – 10000	Quiet time before sampling data

Impedance–Potential

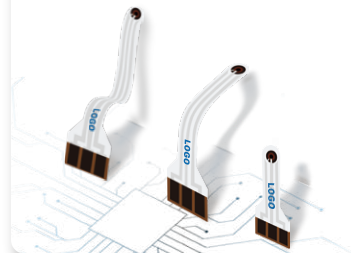
Parameters	Range	Description
Init E (mV)	(Initial E + Amplitude ≤ 2000	Initial potential
Final E (mV)	(Final E + Amplitude ≤ 2000	Final potential
Amplitude (mV)	1 – 500	Sinusoidal amplitude
Freq. (Hz)	Per model	Sinusoidal Frequency
Incr. E	1 – 250	Increment potential
Quiet time (sec)	0 – 10000	Quiet time before sampling data

Customized Bare Sensor / Electrode

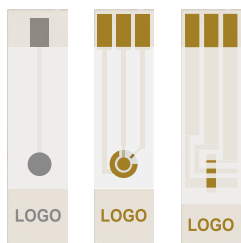
Screen printed electrode: Ag, Carbon, AgCl, screen printed electrodes



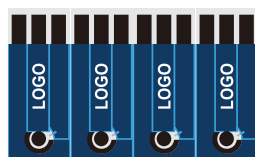
Flexible electrodes for wearable sensor



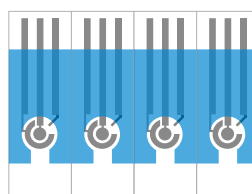
Metal electrode :
Au, Pt, Cr, Bi sputter
deposition electrodes



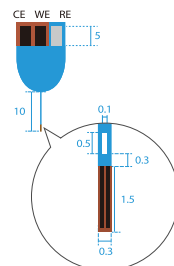
Organic solvent available
Electrode:
Glassy carbon chemical vapor
deposition (CVD) electrodes



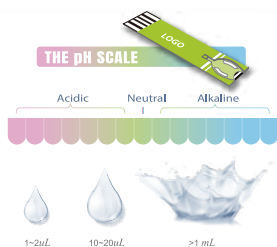
Transparent Electrode



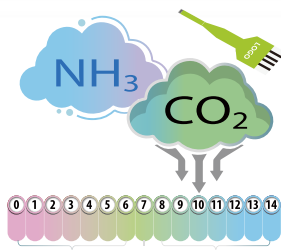
Microelectrode



Customized Functioned Sensor



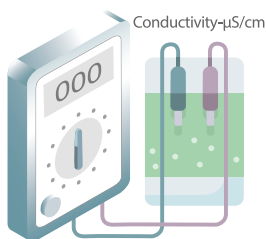
Customized Disposable
Solution pH Electrodes



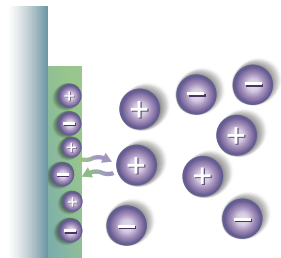
Customized Disposable
Gas pH Electrodes



Customized Disposable Dissolved
Oxygen(DO) Electrodes



Customized Disposable
Conductivity Electrode



Disposable Long-acting Reference
Electrodes (Salt Bridge Type)



All-in-One Disposable
Integrated Electrodes

Customized Potentiostat : We have own electronic development center & Meter and potentiostat production lines

High level Meter



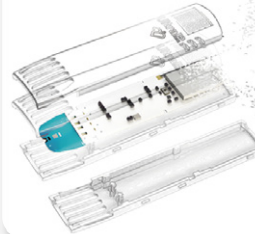
Bluetooth Smartphone
Device



Traditional Meter
BGM/BKM



Disposable Electrochemical
Analyzers



Brand Authorizing

