

Electrochemical Gas Sensor



	O2	O2	CO	H2	H2S	Hydro Carbon, CO2 etc
Model	SS1118	SS2118	SS2128	SS2178	SS2198	IR sensor
Performance Characteristics						
Nominal Range	0~100%	0~30%	0~2,000ppm	0~1,000ppm	0~100ppm	
Maximum Overload	-	-	5,000ppm	2,000ppm	550ppm	
Output Singnal	6.0± 1.0mV	90± 20μA@/20.9% O2	70±20nA/ppm	15±10nA/ppm	700±200nA/ppm	
Resolution	0.1%	0.1%	0.5ppm typical	2ppm	< 0.1ppm typical	
T90 Response Time	≤ 15sec	≤ 15sec	≤ 25sec	≤ 30sec	≤ 20sec	Depends on type of the gas
Typical Baseline Range (pure air)	-	-	≤±2ppm CO equivalent	0 to 30ppm	≤±2ppm H2S equivalent	
Filter Capacity	-	-	-	-	-	
Recommended LoadResistor	-	100Ω	10Ω	10Ω	10Ω	
Repeatability	2% of signal	2% of signal	≤±2ppm CO equivalent	2% of signal	≤±2ppm CO equivalent	
Output Linearity	Linear					
Positon Sensitivity	None					
Bias Voltage	Not required					
Weight	7g	18g	6g	6g	6g	15g
Environmental						
Temperature Range	-20°C ~ +50°C					
Pressure Range	Atmospheric ±10%					
Relative Humidity Range	15~90% RH					
Maximum Zero Shift (+20°C to +40°C)	-	-	-2 to 3ppm	-20ppm equivalent	0.2ppm equivalent	
Life Time						
Long Term Output Drift	Less than 5%/year					
Storage Life	6months					
Storage Temperature	0~20°C					
Eapected operating Lift(years)	< 2years	< 2years	> 2years	> 2years	> 2years	
Warranty Period	2years					



NH3	NO2	2ECO	CO / H2S (Dual sensor)		Ethanol	Formaldehyde
SS21N8	SS2148	SS2128_B	SS21CH		SS21A8	SS21F8
0-100 ppm	0-20 ppm	0-1,000ppm	0-500ppm CO	0~100ppm H2S	0-1,000ppm	0-1,000ppm
200 ppm	40 ppm	2,000ppm	2,000ppm CO	500ppm H2S	2,000ppm	2,000ppm
100±30nA/ppm	- 220±50nA/ppm	60±20nA/ppm	80±20nA/ppm	775±275nA/ppm	25~40nA/ppm	200±50nA/ppm
< 1 ppm typical	< 0.1 ppm typical	≤0.5ppm typical	≤0.5ppm typical	≤0.5ppm typical	≤0.01ppm typical	≤1ppm typical
<30sec	<30sec	<20seconds	<30seconds		<20seconds	<60seconds
±2ppm NH3 equivalent	±1ppm NO2 equivalent	≤±2ppm CO equivalent	≤±2ppm CO	≤±0.5ppm H2S equivalent	≤±2ppm	≤±2ppm
-	-	≥20,000ppm hours	-	-	-	-
10Ω	10Ω	10Ω	10Ω	10Ω	10Ω	10Ω
<±10%	<±5%	≤±2ppm CO equivalent	≤±3% CO	≤±2% H2S equivalent	≤±2%	≤±3%
Linear		Linear up to 2,000ppm		Linear		
None						
Not required						
6g	6g	7g	18g	6g	6g	6g
-20°C ~ +50°C						
800 to 1200 mbar	800 to 1200 mbar	Atmospheric ±10%				
15~90% RH						
± 2ppm equivalent	± 1ppm equivalent	-	-	-2 to 3ppm	-20ppm equivalent	0.2ppm equivalent
Less than 10%/year		Less than 10%/year		Less than 5%/year		
6months						
0~20°C						
> 2years	> 2 years	< 2years	< 2years	> 2years	> 2years	> 2years
2years						