EC Sense Selection Guide

3 models · downloadable datasheets also available per model on anchorsensor.com

DS4-C2H4-100 — DS4-C2H4-100 Smart Ethylene Gas Sensor

The EC Sense DS4 DS4-C2H4-100 is a smart Ethylene gas sensor based on printed solid-polymer electrochemical technology. It integrates a high-performance MCU and high-precision ADC, and ships factory-calibrated with Ethylene (C2H4) standard gas — ready to measu…

Target Gas	Ethylene (C2H4)
Operating Principle	Printed Solid-Polymer Electrochemical (smart digital output)
Range	0 – 100 ppm
Resolution	0.1 ppm
Accuracy	± 5% F.S
Repeatability	< ± 2%
Linearity	Linear
Response Time	< 3 s (T90 < 60 s)
Stabilization	< 2 min (no warm-up, measure on power-up)
Long-Term Drift	< 1% / month
Output Signal	UART 3.3 V half-duplex single-bus, 9600 bps, 8N1
Supply Voltage	3.3 – 12 V DC (recommended 5 V)
Operating Current	0.65 mA @ 5 V DC
Peak Current	1 mA @ 5 V DC
Sleep Current	0.35 mA @ 5 V DC
Power Consumption	≤ 5 mW @ 5 V
Operating Temp.	-40 ℃ ~ +55 ℃
Operating Humidity	15 – 95% RH (non-condensing)
Operating Pressure	Atmospheric pressure ±10%
Storage Temp.	0 ~ +20 ℃
Housing	ABS
Weight	4.56 g
Expected Lifetime	> 3 years (in air)
Warranty	12 months

Calibrated with Ethylene (C2H4) standard gas. Each sensor is factory-calibrated and ready to use without re-calibration. An open calibration protocol supports offline secondary calibration and one-cli

DS4-C2H4-20 — DS4-C2H4-20 Smart Ethylene Gas Sensor

The EC Sense DS4 DS4-C2H4-20 is a smart Ethylene gas sensor based on printed solid-polymer electrochemical technology. It integrates a high-performance MCU and high-precision ADC, and ships factory-calibrated with Ethylene (C2H4) standard gas — ready to measur…

Target Gas	Ethylene (C2H4)
Operating Principle	Printed Solid-Polymer Electrochemical (smart digital output)
Range	0 – 20 ppm
Resolution	0.01 ppm
Accuracy	± 5% F.S
Repeatability	< ± 2%
Linearity	Linear
Response Time	< 3 s (T90 < 60 s)
Stabilization	< 2 min (no warm-up, measure on power-up)
Long-Term Drift	< 1% / month
Output Signal	UART 3.3 V half-duplex single-bus, 9600 bps, 8N1
Supply Voltage	3.3 – 12 V DC (recommended 5 V)
Operating Current	0.65 mA @ 5 V DC
Peak Current	1 mA @ 5 V DC
Sleep Current	0.35 mA @ 5 V DC
Power Consumption	≤ 5 mW @ 5 V
Operating Temp.	-40 ℃ ~ +55 ℃
Operating Humidity	15 – 95% RH (non-condensing)
Operating Pressure	Atmospheric pressure ±10%
Storage Temp.	0 ~ +20 ℃
Housing	ABS
Weight	4.56 g
Expected Lifetime	> 3 years (in air)
Warranty	12 months

Calibrated with Ethylene (C2H4) standard gas. Each sensor is factory-calibrated and ready to use without re-calibration. An open calibration protocol supports offline secondary calibration and one-cli

DS4-C2H4-500 — DS4-C2H4-500 Smart Ethylene Gas Sensor

The EC Sense DS4 DS4-C2H4-500 is a smart Ethylene gas sensor based on printed solid-polymer electrochemical technology. It integrates a high-performance MCU and high-precision ADC, and ships factory-calibrated with Ethylene (C2H4) standard gas — ready to measu…

Target Gas	Ethylene (C2H4)
Operating Principle	Printed Solid-Polymer Electrochemical (smart digital output)
Range	0 – 500 ppm
Resolution	0.1 ppm
Accuracy	± 5% F.S
Repeatability	< ± 2%
Linearity	Linear
Response Time	< 3 s (T90 < 60 s)
Stabilization	< 2 min (no warm-up, measure on power-up)
Long-Term Drift	< 1% / month
Output Signal	UART 3.3 V half-duplex single-bus, 9600 bps, 8N1
Supply Voltage	3.3 – 12 V DC (recommended 5 V)
Operating Current	0.65 mA @ 5 V DC
Peak Current	1 mA @ 5 V DC
Sleep Current	0.35 mA @ 5 V DC
Power Consumption	≤ 5 mW @ 5 V
Operating Temp.	-40 ℃ ~ +55 ℃
Operating Humidity	15 – 95% RH (non-condensing)
Operating Pressure	Atmospheric pressure ±10%
Storage Temp.	0 ~ +20 ℃
Housing	ABS
Weight	4.56 g
Expected Lifetime	> 3 years (in air)
Warranty	12 months

Calibrated with Ethylene (C2H4) standard gas. Each sensor is factory-calibrated and ready to use without re-calibration. An open calibration protocol supports offline secondary calibration and one-cli