

EC Sense Selection Guide

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

DS4-PH3-20 — DS4-PH3-20 Smart Phosphine Gas Sensor

The EC Sense DS4 DS4-PH3-20 is a smart Phosphine gas sensor based on printed solid-polymer electrochemical technology. It integrates a high-performance MCU and high-precision ADC, and ships factory-calibrated with Phosphine (PH3) standard gas — ready to measur...

Target Gas	Phosphine (PH3)
Operating Principle	Printed Solid-Polymer Electrochemical (smart digital output)
Range	0 – 20 ppm
Resolution	0.1 ppm
Accuracy	± 5% F.S
Repeatability	< ± 2%
Linearity	Linear
Response Time	< 3 s (T90 < 30 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 °C ~ +55 °C
Operating Humidity	15 – 95% RH (non-condensing)
Operating Pressure	Atmospheric pressure ±10%
Storage Temp.	0 ~ +20 °C
Housing	ABS
Weight	4.56 g
Expected Lifetime	> 3 years (in air)
Warranty	12 months

Calibrated with Phosphine (PH3) 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-PH3-2000 — DS4-PH3-2000 Smart Phosphine Gas Sensor

The EC Sense DS4 DS4-PH3-2000 is a smart Phosphine gas sensor based on printed solid-polymer electrochemical technology. It integrates a high-performance MCU and high-precision ADC, and ships factory-calibrated with Phosphine (PH3) standard gas — ready to meas...

Target Gas	Phosphine (PH3)
Operating Principle	Printed Solid-Polymer Electrochemical (smart digital output)
Range	0 – 2000 ppm
Resolution	1 ppm
Accuracy	± 5% F.S
Repeatability	< ± 2%
Linearity	Linear
Response Time	< 3 s (T90 < 30 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 °C ~ +55 °C
Operating Humidity	15 – 95% RH (non-condensing)
Operating Pressure	Atmospheric pressure ±10%
Storage Temp.	0 ~ +20 °C
Housing	ABS
Weight	4.56 g
Expected Lifetime	> 3 years (in air)
Warranty	12 months

Calibrated with Phosphine (PH3) 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