Ningbo Xingpu Selection Guide

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

XPSN401A-G01C1 — XPSN401A-G01C1 Carbon Dioxide NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-G01C1 is a low-power miniature NDIR (Non-Dispersive Infrared) gas sensor with diffusion gas inlet and dual-wavelength optical path. It measures target-gas concentration by infrared absorption, with average operating current below 1 m…

Target Gas	Carbon Dioxide
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 1% VOL
Accuracy	±3% FS or ±5% of reading, whichever is greater
Resolution	0.01% VOL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1 mA, peak < 80 mA
Average Power	< 2.7 mW @ 3.3 V
Output	Analog output + UART
UART Baud Rate	9600 (default) / 19200 / 38400 / 57600
Operating Temp.	-20 ℃ to +60 ℃ (optional -40 ℃ to +70 ℃)
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-20 ℃ to +60 ℃
Operating Pressure	800 ~ 1200 mbar
Dimensions	φ20 × 16.6 mm
Weight	≤ 10 g
Expected Lifetime	5 years (clean room-temperature environment)
Explosion Protection	Ex ia IIC T4 Ga
Certification	GB/T 3836.4-2021

Calibrated with Carbon Dioxide standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-G01E1 — XPSN401A-G01E1 Carbon Dioxide NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-G01E1 is a low-power miniature NDIR (Non-Dispersive Infrared) gas sensor with diffusion gas inlet and dual-wavelength optical path. It measures target-gas concentration by infrared absorption, with average operating current below 1 m…

Target Gas	Carbon Dioxide
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 5% VOL
Accuracy	±3% FS or ±5% of reading, whichever is greater
Resolution	0.01% VOL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1 mA, peak < 80 mA
Average Power	< 2.7 mW @ 3.3 V
Output	Analog output + UART
UART Baud Rate	9600 (default) / 19200 / 38400 / 57600
Operating Temp.	-20 ℃ to +60 ℃ (optional -40 ℃ to +70 ℃)
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-20 ℃ to +60 ℃
Operating Pressure	800 ~ 1200 mbar
Dimensions	φ20 × 16.6 mm
Weight	≤ 10 g
Expected Lifetime	5 years (clean room-temperature environment)
Explosion Protection	Ex ia IIC T4 Ga
Certification	GB/T 3836.4-2021

Calibrated with Carbon Dioxide standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-G01G1 — XPSN401A-G01G1 Carbon Dioxide NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-G01G1 is a low-power miniature NDIR (Non-Dispersive Infrared) gas sensor with diffusion gas inlet and dual-wavelength optical path. It measures target-gas concentration by infrared absorption, with average operating current below 1 m…

Target Gas	Carbon Dioxide
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 20% VOL
Accuracy	±3% FS or ±5% of reading, whichever is greater
Resolution	0.01% VOL (≤10% VOL); 0.1% VOL (>10% VOL)
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1 mA, peak < 80 mA
Average Power	< 2.7 mW @ 3.3 V
Output	Analog output + UART
UART Baud Rate	9600 (default) / 19200 / 38400 / 57600
Operating Temp.	-20 ℃ to +60 ℃ (optional -40 ℃ to +70 ℃)
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-20 ℃ to +60 ℃
Operating Pressure	800 ~ 1200 mbar
Dimensions	φ20 × 16.6 mm
Weight	≤ 10 g
Expected Lifetime	5 years (clean room-temperature environment)
Explosion Protection	Ex ia IIC T4 Ga
Certification	GB/T 3836.4-2021

Calibrated with Carbon Dioxide standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-G01J1 — XPSN401A-G01J1 Carbon Dioxide NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-G01J1 is a low-power miniature NDIR (Non-Dispersive Infrared) gas sensor with diffusion gas inlet and dual-wavelength optical path. It measures target-gas concentration by infrared absorption, with average operating current below 1 m…

Target Gas	Carbon Dioxide
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 60% VOL
Accuracy	±3% FS or ±5% of reading, whichever is greater
Resolution	0.1% VOL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1 mA, peak < 80 mA
Average Power	< 2.7 mW @ 3.3 V
Output	Analog output + UART
UART Baud Rate	9600 (default) / 19200 / 38400 / 57600
Operating Temp.	-20 ℃ to +60 ℃ (optional -40 ℃ to +70 ℃)
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-20 ℃ to +60 ℃
Operating Pressure	800 ~ 1200 mbar
Dimensions	φ20 × 16.6 mm
Weight	≤ 10 g
Expected Lifetime	5 years (clean room-temperature environment)
Explosion Protection	Ex ia IIC T4 Ga
Certification	GB/T 3836.4-2021

Calibrated with Carbon Dioxide standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-G01K1 — XPSN401A-G01K1 Carbon Dioxide NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-G01K1 is a low-power miniature NDIR (Non-Dispersive Infrared) gas sensor with diffusion gas inlet and dual-wavelength optical path. It measures target-gas concentration by infrared absorption, with average operating current below 1 m…

Target Gas	Carbon Dioxide
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 100% VOL
Accuracy	±3% FS or ±5% of reading, whichever is greater
Resolution	0.1% VOL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1 mA, peak < 80 mA
Average Power	< 2.7 mW @ 3.3 V
Output	Analog output + UART
UART Baud Rate	9600 (default) / 19200 / 38400 / 57600
Operating Temp.	-20 ℃ to +60 ℃ (optional -40 ℃ to +70 ℃)
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-20 ℃ to +60 ℃
Operating Pressure	800 ~ 1200 mbar
Dimensions	φ20 × 16.6 mm
Weight	≤ 10 g
Expected Lifetime	5 years (clean room-temperature environment)
Explosion Protection	Ex ia IIC T4 Ga
Certification	GB/T 3836.4-2021

Calibrated with Carbon Dioxide standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.