

Ningbo Xingpu Selection Guide

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

XPSN401A-C00L1 — XPSN401A-C00L1 Combustible Gas NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-C00L1 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 1.2...

Target Gas	Combustible Gas (triple-gas switchable)
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 100% LFL (Methane/Propane/Isobutane switchable)
Accuracy	±1% FS or ±2% of reading, whichever is greater
Resolution	1% LFL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1.2 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.	-40 °C to +70 °C
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 °C to +70 °C
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 Combustible Gas standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-C01L1 — XPSN401A-C01L1 Methane NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-C01L1 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 1.2...

Target Gas	Methane
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 100% LFL
Accuracy	±1% FS or ±2% of reading, whichever is greater
Resolution	1% LFL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1.2 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.	-40 °C to +70 °C
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 °C to +70 °C
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 Methane standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-C02L1 — XPSN401A-C02L1 Propane NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-C02L1 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 1.2...

Target Gas	Propane
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 100% LFL
Accuracy	±1% FS or ±2% of reading, whichever is greater
Resolution	1% LFL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1.2 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.	-40 °C to +70 °C
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 °C to +70 °C
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 Propane standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-C03L1 — XPSN401A-C03L1 Isobutane NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-C03L1 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 1.2...

Target Gas	Isobutane
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 100% LFL
Accuracy	±1% FS or ±2% of reading, whichever is greater
Resolution	1% LFL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1.2 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.	-40 °C to +70 °C
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 °C to +70 °C
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 Isobutane standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN401A-C04L1 — XPSN401A-C04L1 Ethanol NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN401A-C04L1 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 1.2...

Target Gas	Ethanol
Operating Principle	Non-Dispersive Infrared (NDIR, low-power dual-wavelength optical path)
Range	0 – 100% LFL
Accuracy	±1% FS or ±2% of reading, whichever is greater
Resolution	1% LFL
Response Time (T90)	≤ 20 s
Warm-Up Time	≤ 5 s
Supply Voltage	3.0 ~ 5.5 VDC
Operating Current	Average < 1.2 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.	-40 °C to +70 °C
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 °C to +70 °C
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 Ethanol standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.