Ningbo Xingpu Selection Guide

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

XPSN40A-R01L3 — XPSN40A-R01L3 R32 NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN40A-R01L3 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	R32
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 ℃ to +70 ℃
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 ℃ to +70 ℃
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 R32 standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN40A-R02L3 — XPSN40A-R02L3 R410a/b NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN40A-R02L3 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	R410a/b
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 ℃ to +70 ℃
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 ℃ to +70 ℃
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 R410a/b standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN40A-R03L3 — XPSN40A-R03L3 R454a/b NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN40A-R03L3 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	R454a/b
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 ℃ to +70 ℃
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 ℃ to +70 ℃
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 R454a/b standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN40A-R04L3 — XPSN40A-R04L3 R290 NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN40A-R04L3 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	R290
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 ℃ to +70 ℃
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 ℃ to +70 ℃
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 R290 standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.

XPSN40A-R05L3 — XPSN40A-R05L3 R600A NDIR Infrared Gas Sensor

The Ningbo Xingpu XPSN40A-R05L3 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	R600A
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 ℃ to +70 ℃
Operating Humidity	0% ~ 95% RH (non-condensing)
Storage Temp.	-40 ℃ to +70 ℃
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 R600A standard gas; regular zero calibration in clean air is recommended — see the datasheet communication protocol for commands.