

Model N701H

High Performance Zero Air System



- ▶ Long life scrubbers
- ▶ Regenerative, heatless dryer
- ▶ High performance CO/Hydrocarbon scrubber
- ▶ Trace level output purity
- ▶ Dew point indicator
- ▶ Modbus connectivity (standard)
- ▶ Automatic pump control & water drain

The N701H has digital communications including RS232 and TCP/IP with Modbus communications. This allows remote monitoring of key instrument functions including dewpoint status, scrubber temperature, box temperature, and output pressure. Additionally, this digital access provides the ability to remotely disable the internal pump, allowing longer service intervals and less power consumption. The user can also remotely start instrument warm-up prior to arrival at the site.

The N701H is a fully self-contained source of high purity zero air for dilution calibrators. It is ideal for use with highly sensitive analyzers in ambient background and trace level applications. The N701H includes a dewpoint sensor, an oil-less and diaphragm-free pump, and scrubbers to remove SO₂, NO, NO₂, O₃, H₂S, and NH₃, plus a high performance heated converter for effective removal of Carbon Monoxide (CO) and Hydrocarbon gases. The N701H is proven to effectively remove contaminants of interest to concentration levels that are below the detection limits of Trace-level gas analyzers.

The high-capacity, regenerative, heatless dryer removes water and produces output with a dew point of less than -40°C (flow rate of up to 30 SLPM at 30 psig, at sea level). The system's pressure, temperature, and dewpoint values are all continuously monitored, which allows a microcontroller to adjust the pump cycling frequency, valve timing, and heater power for optimal performance.



N701H Specifications

● Maximum Output	30 SLPM at 30 psig; 10 SLPM at 60 psig
● Dew Point	Less than -40°C
● Dryer	Regenerative, heatless dryer with lifetime of greater than 5 years
● Output Concentration	SO ₂ < 0.025 ppb H ₂ S < 0.025 ppb NO < 0.025 ppb NO ₂ < 0.025 ppb NH ₃ < 0.025 ppb O ₃ < 0.3 ppb CO < 10 ppb Hydrocarbons < 0.25 ppb
● Compressor	Dual-cylinder, internal long-life, oil-less piston pump
● Power Requirements	110V-120V, 60Hz 220V-240V, 50/60Hz
● Included I/O	1 x Ethernet: 10/100Base-T 1 x RS232 (57,600 baud) MODBUS Protocol Support
● Operating Temperature Range	5 - 40°C
● Dimensions (HxWxD)	8.75" x 17" x 28" (222 x 432 x 711.2 mm)
● Weight	69 lbs (31.3 kg)

*Specifications subject to change without notice.
All specifications are based on constant conditions.*

All N Series instruments include a 2-year manufacturer's warranty as well as email and phone support for the lifetime of the instrument.



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(DCN 8496) 02.28.22



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