

Model N701

Zero Air System



- ▶ Long life scrubbers
- ▶ Regenerative, heatless dryer
- ▶ Optional CO or CO/Hydrocarbon scrubber
- ▶ Easy disassembly for routine maintenance
- ▶ Dew point indicator
- ▶ Optional Modbus connectivity
- ▶ Automatic pump control & water drain

The N701 is a fully self-contained source of clean, dry air for dilution calibrators. It can also simultaneously be used as a pressure source for activating instrument pneumatic valves and/or purge air for permeation tube ovens. The N701 includes a dewpoint sensor, an oil-less and diaphragm-free pump, and scrubbers to remove SO₂, NO, NO₂, O₃, H₂S, and NH₃. An optional high performance heated converter is available for effective removal of Carbon Monoxide (CO) and Hydrocarbon gases.

The regenerative, heatless dryer removes water and produces output with a dew point of less than -20°C (flow rate of up to 30 SLPM at 30 psig, at sea level). The system's pressure, temperature, and dew point values are all continuously monitored, which allows a microcontroller to adjust the pump cycling frequency, valve timing, and heater power for optimal performance.

The N701 has optional 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.



N701 Specifications

• Maximum Output	18 SLPM at 30 psig
• Dew Point	-20°C up to 15 SLPM / -10°C above 15 SLPM
• Dryer	Regenerative, heatless dryer with lifetime of greater than 5 years
• Output Concentration	SO ₂ < 0.1 ppb H ₂ S < 0.1 ppb NO < 0.1 ppb NO ₂ < 0.1 ppb NH ₃ < 0.1 ppb O ₃ < 0.4 ppb CO < 20 ppb (requires CO scrubber option) Hydrocarbons < 5 ppb (requires hydrocarbon scrubber option)
• Compressor	Internal long-life, oil-less piston pump
• Power Requirements	110V-120V, 60Hz 220V-240V, 50/60Hz
• Optional 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	Without options: 56 lbs (25.4 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.



TELEDYNE API
Everywhereyoulook™

9970 Carroll Canyon Road, San Diego, CA 92131
Phone 858-657-9800 ■ Fax 858-657-9816
Email api-sales@teledyne.com

For more information about Teledyne API instruments, visit our website at:

www.teledyne-api.com

© 2022 Teledyne API
Printed documents are uncontrolled. SAL000128A
(DCN 8496) 02.28.22



Intertek