Self-Contained FT-IR Purge Gas Generator

Model 74-5041NA

The Parker Self-Contained FT-IR Purge Gas Generator completely eliminates the inconvenience and the high costs of nitrogen cylinders and dewars, while significantly reducing operating costs of the costs of operating FT-IR instruments. The Model 74-5041NA generates cleaner background spectra in a shorter period of time as well as more accurate analysis by improving the signal-to-noise ratio. It provides instruments with CO2-free compressed air at less than -100°F (-73°C) dewpoint with no suspended impurities larger than 0.01 micron, is quiet, reliable, and easy to install. Simply attach the outlet airline, plug the electrical cord into a wall outlet, and the unit is ready for operation.

Product Features:

- Includes state-of-the-art and oil-less compressor
- Compact, portable design is ideal for mobile labs
- Improves signal-to-noise ratio even on non-purge systems
- Increases FT-IR sample throughput and maximizes up-time
- Special sound insulation design ensures quiet operation

Ordering Information

Description	Model
FT-IR Purge Gas Generator	74-5041NA
Annual Maintenance Kit	74065
Annual Maintenance Kit Part Number	74065
Preventive Maintenance Plan	74-5041-PM
Extended Support with 24 Month Warranty	74-5041-EN2

ENGINEERING YOUR SUCCESS.

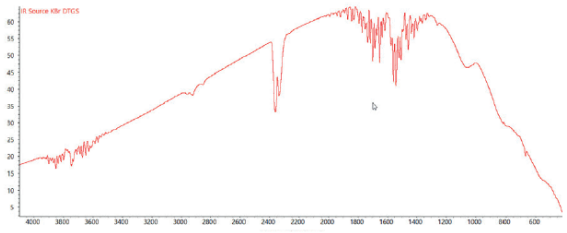
Principal Specifications

Model 74-5041NA	
Maximum Flow Rate (at 80 psig)	60 SCFH (28 lpm)
Maximum Output Pressure	80 psig
CO2 Concentration	< 1 ppm
Dewpoint	-100°F (-73°C)
Outlet Port Size	Female 1/4" NPT
Minimum/Maximum Ambient Temperature	30°F/90°F (-1°C/32°C)
Electrical Requirements (single phase)	120 VAC/60 Hz, 20 amps
Compressor	3/4 hp
Dimensions	18" w x 31" h x 32" d (46 cm x 76 cm x 81 cm)
Shipping Weight 250 lbs	250 lbs (114 kg)

Comparative Spectral Analysis in Purging an FT-IR Sample Chamber

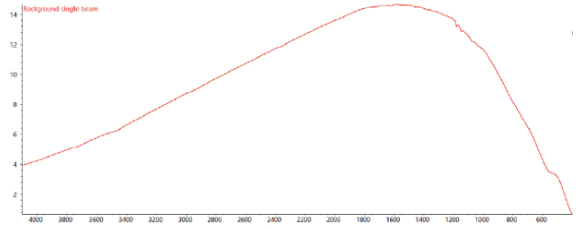
The spectrum collected without purge gas is extremely noisy in several regions. When the sample is purged with a Parker Purge Gas Generator, water vapor and CO2 are removed and the noise in the spectrum is removed so that important features in the spectrum can be observed.

Single Beam Unpurged



wavenumbers (cm-1)

Single Beam Purged



wavenumbers (cm-1)

Both samples were created using a Thermo-Nicolet iS 10 FTIR Spectrometer.

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