

Self-Contained FT-IR Purge Gas Generator

The Parker Balston Model 74-5041NA FT-IR Purge Gas Generator is specifically designed for use with FT-IR spectrometers to provide a purified purge and air bearing gas supply from compressed air. The Parker Balston model 74-5041NA provides instruments with CO₂-free compressed air at less than -100°F (-73°C) dew point with no suspended impurities larger than 0.01 micron 24 hours/day, 7 days/week. The Parker Balston Self-Contained FT-IR Purge Gas Generator completely eliminates the inconvenience and the high costs of nitrogen

cylinders and Dewars, and significantly reduces the costs of operating FT-IR instruments.

The Parker Balston unit generates cleaner background spectra in a shorter period of time and more accurate analysis by improving the signal-to-noise ratio. The typical payback period is less than one year.

The generator is quiet, very reliable, and easy to install - simply attach the outlet air line, plug the electrical cord into a wall outlet, and the unit is ready for trouble-free operation.



Model 74-5041NA



Features and Benefits

- Less expensive and more convenient than nitrogen cylinders and dewars
- Includes state-of-the-art, 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 thru-put and maximizes up-time
- Special sound insulation design ensures quiet operation



Self-Contained FT-IR Purge Gas Generator

Principal Specifications

| | |
|---|---|
| Self-Contained FT-IR Purge Gas Generator | 74-5041NA |
| Maximum Flow Rate (at 80 psig) | 60 SCFH (28 lpm) |
| Maximum Output Pressure | 80 psig |
| CO ₂ Concentration | < 1 ppm |
| Dew Point | -100°F (-73°C) |
| Outlet Port Size | 1/4" NPT (female) |
| Min/Max Ambient Temperature | 30°F/90°F (-1°C/32°C) |
| Electrical Requirements (single phase) | 120 VAC/60 Hz, 20 amps (1) |
| 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. (114 kg) |

NOTES

1 Refer to voltage appendix for electrical and plug configurations for outside North America.

Ordering Information

for assistance, call 800-343-4048, 8 to 5 Eastern Time

| Description | Model Number |
|---|--------------|
| FT-IR Purge Gas Generator | 74-5041NA |
| Annual Maintenance Kit | 74065 |
| Preventive Maintenance Plan | 74-5041-PM |
| Extended Support with 24 Month Warranty | 74-5041-DN2 |

Comparative Spectral Analysis in Purging an FT-IR Sample Chamber

This spectra comparison illustrates that a Parker Balston FT-IR Purge Gas Generator allows an FT-IR to be purged at a much higher flow rate than is practical with nitrogen. The sample chamber purged by the Parker Balston unit is free of CO₂ and water faster than the sample chamber purged by nitrogen.

