

FT-IR Purge Gas Generators

Spectra 15, Spectra 30, & Model 75-62



The Parker FT-IR Purge Gas Generator is specifically designed for use with FT-IR Spectrometers to provide a purified purge and air bearing gas from compressed air.

The generators supply carbon dioxide-free air at less than -100°F (-73°C) dew point with no suspended impurities larger than 0.01 µm. Designed to operate continuously, the Spectra significantly reduces operating costs of FT-IR instrumentation. It generates cleaner background spectra in a shorter period of time along with a more accurate analysis by improving the signal-to-noise ratio. Ideally suited for use with CO2 Analyzers and Matrix GC's in addition to supplying gas to other laboratory instruments, these generators supply carbon dioxide-free air at less than -100°F (-73°C) dewpoint with no suspended impurities larger than 0.01 µm.



"A Parker FT-IR Purge Gas Generator and Self Contained Lab Gas Generator were used in conjunction with the Society for Applied Spectroscopy Fourier Transform Infrared Spectrometry Workshop at the University of Georgia (organized by Dr. James A de Haseth and Dr. Peter R. Griffiths). The Self-Contained Lab Gas Generator provided excellent purge for six spectrometers. The organizers were so pleased with the performance of the Parker systems, they have requested that Parker Hannifin participate in future workshops."

Dr. James A. de Haseth and Dr. Peter R. Griffiths

Product Features:

- Compact design frees floor space
- Spectra models are wall mountable
- Improves signal-to-noise ratio even on non-purge systems
- Increases FT-IR sample throughput and maximizes up-time
- Recommended by all major FT-IR manufacturers
- Typical payback period of less than 1 year
- Easy installation and quiet operation



ENGINEERING YOUR SUCCESS.

Principal Specifications

Model	Spectra 15	Spectra 30	75-62
Minimum/Maximum Inlet Air Pressure	60 psig/125 psig		
Flow Rate at Min. Inlet Air Pressure	18 scfh (9 lpm)	36 scfh (17 lpm)	120 scfh (57 lpm)
Flow Rate at Max. Inlet Air Pressure	36 scfh (17 lpm)	72 scfh (34 lpm)	216 scfh (102 lpm)
CO2 Concentration	< 1 ppm		
Dewpoint	-100°F (-73°C)		
Maximum Inlet Air Temperature ¹	78°F (25°C)		
Air Consumption for Regeneration ²	30 scfh (14 lpm)	60 scfh (28 lpm)	120 scfh (57 lpm)
Inlet/Outlet Port Size	50°F/104°F (10°F/40°F)		
Electrical Requirements ³	90-250 VAC/50-60 Hz		
Dimensions	29" w x 53" d x 76" h (74 cm x 51 cm x 193 cm)		
Shipping Weight	26 lbs (12 kg)	60 lbs (27 kg)	88 lbs (40 kg)

1. Outlet dewpoint will increase at higher inlet compressed air temperatures

2. Total air consumption = regeneration flow + flow demand

3. Units provided with universal power supply

Ordering Information

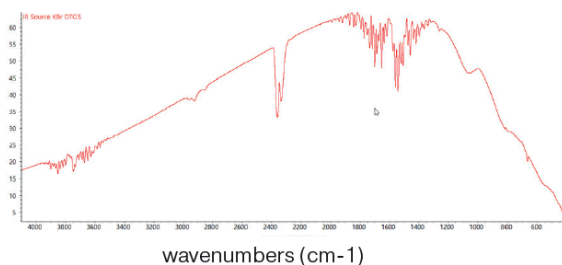
Model	Spectra 15	Spectra 30	75-62
Annual Maintenance Kit	MKSPECTRA15	MKSPECTRA30	MK7520
Installation Kit for All Models	K-0001*	IK-0001*	IK-0002*
Annual Maintenance Kit Part Number	MKSpectra15-12M	MKSpectra30-12M	MK7520
Preventive Maintenance Plan	75-45-PM	75-52-PM	75-62-PM
Extended Support with 24 Month Warranty	75-45-EN2	75-52-EN2	75-62-EN2

*Consult factory for tubing needs

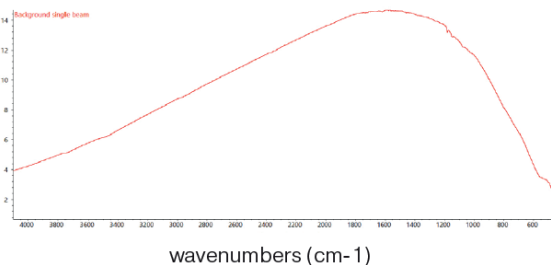
Comparative Spectral Analysis in Purging an FT-IR Sample Chamber

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



Single Beam Purged



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

