

# FTIR PURGE GAS GENERATORS

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For Dry, CO<sub>2</sub>-Free Air to 60 lpm



Compact, regenerative purge gas generators capable of delivering up to 2 SCFM (60 lpm) of dry, CO<sub>2</sub>-free air at a dewpoint of -100°F (-73°C) and a CO<sub>2</sub>-content of less than 1 ppm. Ideal for FTIR spectrometer purge and emissions monitoring applications. Units come standard with an inlet particulate filter, inlet coalescing filter, purge mufflers, moisture indicator, wall-mount bracket and outlet filter-regulator assembly. Accessories include sound suppression kit, flow meter and surge tank.

### PRODUCT FEATURES

- CO<sub>2</sub>-free air to less than 1 ppm
- Ultra-dry air to better than -100°F/-73°C dewpoint
- Continuous self-regenerative operation
- Outlet flow capacities to 2 SCFM (60 lpm)
- Operating pressures of 50 to 150 PSIG (345 to 1000 kPa)
- Compact, lightweight aluminum construction
- Low power requirement (35 watts)
- Standard purge mufflers ensure quiet operation
- Easy to install and no regular maintenance is required
- Ideal for laboratory, OEM and point-of-use applications

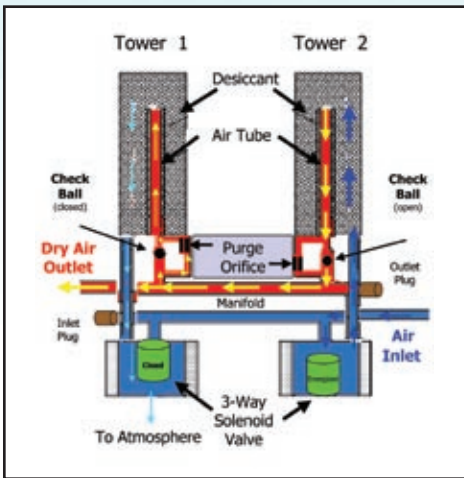
### TYPICAL APPLICATIONS

- FTIR spectrometer purge
- Dilution air for stack gas emissions monitoring (CEMS)



**FTIR PURGE GAS GENERATORS - DESCRIPTION OF OPERATION**

Ordinary compressed inlet air is passed through one layered desiccant bed where the water is removed first, followed by the carbon dioxide. The air then continues to the outlet side of the manifold and on to the application. A portion of the purified air is expanded through an orifice and directed back through the off-line desiccant bed, purging the accumulated H<sub>2</sub>O and CO<sub>2</sub>. Every 30 seconds, a solid state timer and two solenoid valves reverse the process. The result is a continuous supply of dry, CO<sub>2</sub>-free air.



**SPECIFICATIONS**

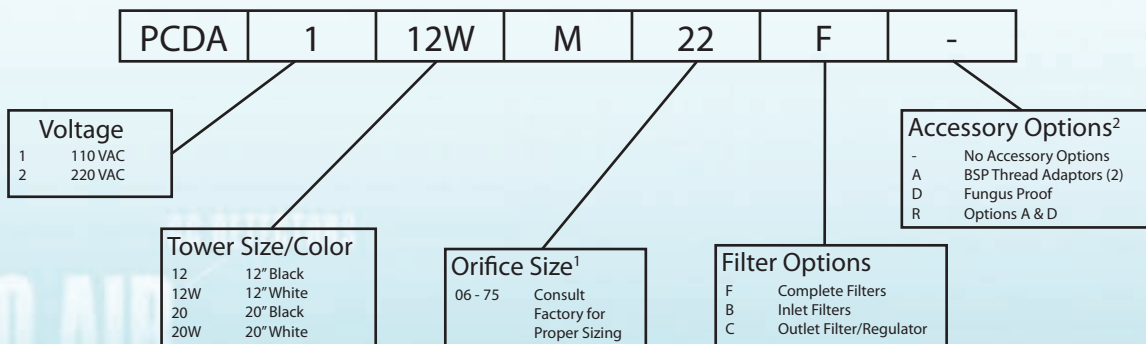
		PCDA112	PCDA120
Outlet Air CO <sub>2</sub> Concentration		<1 ppm	
Outlet Air Dewpoint		-100°F / -73°C or better ADP	
Max. Pressure Drop (PSID)		3 PSID Maximum	
Max. Inlet Air Temperature		125°F Maximum	
Weight Dimensions		12 lbs. 17"H x 11"W x 5"D	20 lbs. 25"H x 11"W x 5"D
Operating Pressure PSIG		Maximum inlet and outlet flows (SCFM)*	
150	Inlet / Outlet	2.1 / 1.55	4.8 / 3.5
	Purge Orifice Sizing #	#15	#26
125	Inlet / Outlet	1.8 / 1.2	4.1 / 2.8
	Purge Orifice Sizing #	#18	#28
110	Inlet / Outlet	1.55 / 1.0	3.3 / 2.2
	Purge Orifice Sizing #	#18	#28
100	Inlet / Outlet	1.5 / 0.8	3.4 / 2.0
	Purge Orifice Sizing #	#22	#32
90	Inlet / Outlet	1.4 / 0.7	3.0 / 1.8
	Purge Orifice Sizing #	#22	#32
80	Inlet / Outlet	1.25 / 0.65	2.5 / 1.4
	Purge Orifice Sizing #	#22	#32
70	Inlet / Outlet	1.0 / 0.5	2.0 / 1.0
	Purge Orifice Sizing #	#22	#32
60	Inlet / Outlet	0.8 / 0.35	Not Applicable
	Purge Orifice Sizing #	#22	
50	Inlet / Outlet	0.6 / 0.2	
	Purge Orifice Sizing #	#22	

Sizing information is based on inlet air conditions of +70°F / +21°C

\*Note: For flow rates in liters per minute (lpm), multiply flows in SCFM by 28.3.

**ORDERING INFORMATION**

**Bold Options are Standard Equipment**



**NOTES:**

1. See specifications table for purge orifice numbers.
2. Unit comes standard with power cord, purge mufflers and moisture indicator.

P011048F15 - 2-yr Warranty Kit, PCDA

P011048F24 - Annual Maintenance Kit, PCDA