RFS Dehydration Systems For Large, Medium and Small Capacity

Prevent moisture condensation and degradation in performance

The RFS digital dehydrator allows for increased system flexibility to suit individual customer requirements – easily configure options in the field as needed!

The APD-D Series Automatic Pressurization Dehydrator is available in standard system capacity and large system capacity models. The APD-D Series will provide reliable pressurization of elliptical waveguide, coaxial cable and rigid transmission line systems – and the new digital design will now enable easy on-site configuration of options such as humidity alarm, high pressure alarm, run time alarm and system purge.

The APD-D dehydrator includes a self-contained, completely automated air drying system that utilizes a pressure swing adsorption cycle to provide pressurized dry air while continuously purging the collected moisture to the atmosphere. It can be retrofitted into any existing RFS dehydrator installation, easily integrating with existing microwave antenna system equipment. It also supports easy option upgrades with no system downtime required by enabling options to be added to the base model or reset based on customer specifications in the factory or in the field by working with RFS.

For applications where only DC power is available, RFS offers medium and small capacity dehydrators operating with voltage between 48 and 60 VDC.

These fully automatic dehydrators are factory pre-configured and include low / high pressure, high humidity and system and power alarms. An optional module for remote monitoring over Ethernet is available. The LAB4 dehydrator has 4 pressure ports and the MINILAB is delivered with 6 pressure ports that can be individually opened and closed.



RFS APD-D DIGITAL DEHYDRATOR SERIES



LAB4DC-B DEHYDRATOR

		Air Flow		Power Supply	Output Pressure	
	Model Number	NI/h	SCFM	V	kPa	psig
Large Capacity	<u>APD70-D</u>	1190	0.7	115 AC/60Hz	6.9-68.9	1-10
	APD72-D	990	0.58	230 AC/50Hz	6.9-68.9	1-10
Medium Capacity	APD20-D	340	0.2	115 AC/60Hz	6.9-68.9	1-10
	APD22-D	280	0.17	230 AC/50Hz	6.9-68.9	1-10
	<u>LAB4DC-B</u>	300	0.18	48-60 DC	1-6	0.15-0.87
Small Capacity	MINILAB-DC	150	0.09	48-60 DC	2	0.3

RFS ELLIPTICAL WAVEGUIDE AND ACCESSORIES SELECTION GUIDE

RFS Pressurization Products Complete End-To-End Solutions

A vast array of products for installation, operation and maintenance





Gas Distribution Manifolds are used for pressure distribution to several transmission lines. They allow easy maintenance checks of individual lines. Includes 1/8" FPT input, distribution manifold block and one needle release valve. 0-15 psig pressure gauge, 15 ft. (4.5m) 3/8" plastic tubing for each outlet. Also included are four 3/8" plastic tubing racks (10 slots per rack), one roll of teflon tape and 24 nylon ties. Designate number of outlets by suffix number, i.e., GDM-2 for two outlets, GDM-4 for four outlets, etc.

Products for APD Dehydrator-Series			
Model Number	Description		
<u>GDM-2</u>	Gas Distribution Manifold 2-ports		
<u>GDM-4</u>	Gas Distribution Manifold 4-ports		
<u>GDM-6</u>	Gas Distribution Manifold 6-ports		
<u>GDM-8</u>	Gas Distribution Manifold 8-ports		
SHELF-APD-D	Shelf, Wall / Rack Mount for APD-D series dehydrators		



RFS offers all the necessary components to connect the LAB4 and MINILAB dehydrators to the waveguide connectors. A flexible butyl hose is available in 10m and 50m length with all necessary adapters and clamps for secure air connection.

Products for LAB and MINILAB Dehydrator-Series			
Model Number	Description		
<u>TUBE-01-010M</u>	Butyl Hose, 6mm inner diameter, 10m length		
<u>TUBE-01-050M</u>	Butyl Hose, 6mm inner diameter, 50m length		
TUBE-01-G18	Tube Adaptor with G 1/8" thread for TUBE-01-xxxM		
TUBE-SEAL	Teflon Sealing Tape		
TUBE-0816	Hose Clamp from 8mm to 16mm		



For waveguides with small air volume (< 2 liter) a humidity monitoring kit is deemed sufficient after filling the waveguide with dry air or nitrogen. For these applications RFS offers the cost-effective DC-Kits in several sizes. These kits can be used for 6m of RFS E105 waveguide and up to 75m of RFS E380 waveguide.

Desiccant catridge Kits for moisture monitoring				
Model Number	Description			
DC-KIT-B	For E100 to E220			
DC-KIT-220	For E250 and connectors with PBR220 flange			
DC-KIT-260	For E250 and E300 with connectors with PBR260 flange			
DC-KIT-320	For E300 and E380 with connectors with PBR320 flange			