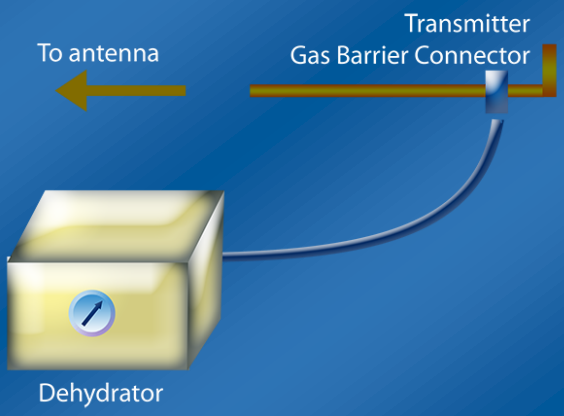
KINTRONIC LABS

an ISO 9001 registered company

LAB4.50 and LAB9.50 Automatic Dehydrators

For Air dielectric coaxial cable



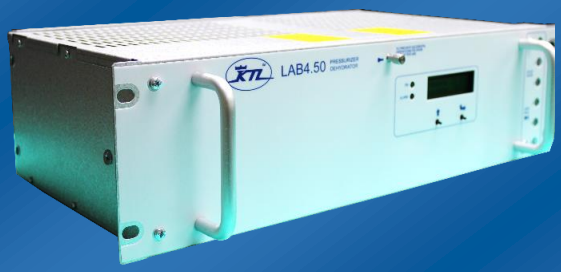
Applications: High power AM, FM and TV stations

Purpose: To remove humidity from the transmission line

If moisture is not removed from the interior of the pressurized unit or transmission line, it will condense when the weather cools, and it will cause arcing and permanent physical destruction

WARNINGS:

1. A "garage" air compressor is NOT equivalent to a dehydrator and will not work
2. Do not over-pressurize the system
3. Wait for the pressure gauge to stabilize



Model	LAB4.50	LAB9.50
Maximum Flow Rate	0.18 CFM (300 l/h)	0.6 CFM (1000 l/h)
Output pressure	1.45 – 8.7 PSIG (10 – 60 kPa)	
Output Air Dew Point	Better than -49° F (-45° C) at 80% RH at 68° F (20° C)	
Safety Valve	Built in, factory set at 10 PSIG (70 kPa)	
Regeneration	Automatic by heating	
MTBF	Higher than 165,000 h, according to MIL HDBK 217F at Ground Base conditions, 77° F (25° C) ambient temperature, 50% flow rate	
Standard Outlets	6 outlets, each with ON/OFF valve	4 or 8 outlets, each with ON/OFF valve
Outlets Fitting	3/8 " (9.5 mm) diameter, others on request	
Mounting	Wall and floor, 19" and ETSI N3 racks	Wall, 19" and ETSI N3 racks
Weight	18.7 lbs (8.5 kg)	35.2 lbs (14 kg)
Power Supply	Please specify 110-120 or 220-240 Vac, 50/60 Hz	Please specify 110-120 or 220-240 Vac, 50/60 Hz
Local Alarms	Low/high pressure; high humidity; power and system failures	
Remote Alarms	All alarms are remotely signaled by SPDT Relay	
LED Indications	Power on, Alarms	

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Description and Features

The LAB4.50 and 9.50 dehydrators achieve reduced mechanical wear and noise, and therefore, a long lifetime through its adaptive flowrate feature, dual compressors and drying chambers, and the fact that there are no moving mechanical parts in the system. Pump speed control avoids mechanical pressure regulators, thus eliminating undesirable pressure losses and a worse response to plant air flow regulation.

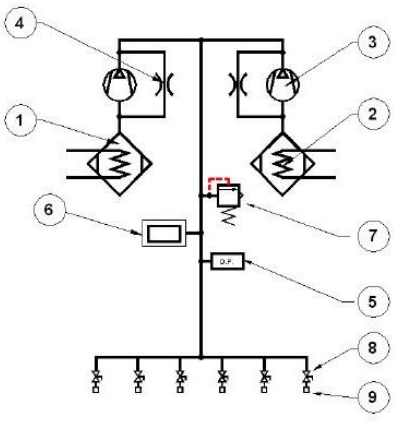
Two dry chambers contain the desiccant and dry airstream by absorption process. The chambers operate on alternate cycles so while the first chamber dries, the second one regenerates the desiccant by heating and backwashing with a small reverse dry air flow. This technology reduces overall power consumption.

The Pulse Width Modulation (PWM) controls the pump, adapting the flow rate to the real time leakage rate. This also contributes to the lower power consumption and very high MTBF. **NO** preventive maintenance is required!

OPTIONAL FEATURES:

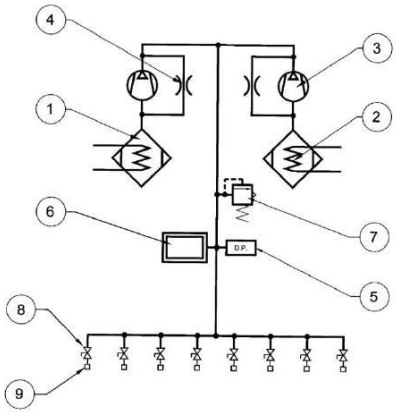
- Remote control through SNMP protocol and HTTP interface by a 10/100 Mbit Ethernet interface
- Digital flowmeter with data shown on the display
- Power supply and alarm remote connectors, outlets with hose-tail fittings are available on the rear panel.

Dimensions	LAB4.50	LAB9.50
Wall and Floor Mounting *LAB9.50 – Wall ONLY*	W: 19” (482 mm) H: 5.2” (132 mm) D: 13.2” (335 mm)	W: 19” (482 mm) H: 12.2” (310 mm) D: 9” (230 mm)
19” rack mounting	W: 19” (482 mm) H: 5.2” (132 mm) D: 9.7” (246 mm)	W: 19” (482 mm) H: 12.2“ (310 mm) D: 5.9” (150 mm)
ETSI – N3 mounting	W: 20.8” (529 mm) H: 5.2” (132 mm) D: 9.7” (246 mm)	W: 21” (533 mm) H: 12.2” (310 mm) D: 5.9” (150 mm)



① DRYING CHAMBER
② HEATER
③ PUMP
④ AIR BACKWASHING HOLE
⑤ HUMIDITY PROBE
⑥ DIGITAL PRESSURE GAUGE
⑦ RELIEF VALVE
⑧ SHUT OFF VALVE
⑨ DRY AIR OUTLET

LAB4.50 Schematic



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LAB9.50 Schematic

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