

# KINTRONIC LABS

an ISO 9001 registered company

## LAB4 Dehydrator

for Waveguide & Coaxial Transmission Line



### **LAB4 Features**

- Designed for continuous operation and automatic duty
- Dry air is vented by four or eight standard individual air outlets with hose-tail fittings accessible from the back side of the equipment. Each outlet has an independent shutoff valve.
- Air is dried through absorption by granular substances in two drying chambers while one chamber dries the other one is regenerated by heating and backwashing with a reverse dry air flow
  - o The electronic microprocessor board controls drying cycles and adjusts the cycle's duration according to plant air needs
- Air is compressed by two diaphragm pumps
- A FUNDAMENTAL feature of the LAB4 is the continuous tracking of output pressure through the Pulse Width Modulation (PWM) technique. PWM optimizes the pump's duty, power consumption and acoustic noise by controlling pump speed
  - o Pump speed control eliminates the need for mechanical pressure regulators that introduce undesirable pressure losses and a worse response to flow needs
- No need for pre-settings nor warmup time before start up
- MTBF: 165,000 hrs = 8,760 per year = 19 years without maintenance!
- The LAB4 does not need preventive maintenance during its lifetime

#### **DIMENSIONS:**

19" Rack Mounting: 5.2" H x 19" W x 9.4" Depth

(132 mm H x 482 mm W x 238 mm Depth)

ETSI - N3 Rack Mounting: 5.2" H x 21" W x 9.4" Depth

(132 mm H x 533 mm W x 238 mm Depth)

Wall & Floor Mounting: 5.2" H x 19" W x 11" Depth

(132 mm H x 482 mm W x 278 mm Depth)

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ISO 9001:2008(E) QUALITY MANAGEMENT SYSTEM

QF-723-040 Rev. A

2017-02-09

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## Front & Rear Panel Devices

### Front Panel Rear Panel

- 0.8" x 6" LCD Display
- 2 Functional keys to 1) scroll and 2) switch settings
- 1 bi-color Power On and Alarms LED
- Shut-off outlet valves

- Power Supply connector
- Remote Alarm connector
- Outlets with hose-tail fittings according the equipment configuration

| LAB4 Specifications                  |   |
|--------------------------------------|---|
| Output Pressure                      | Programmable from 0.15 – 0.9 psig (1 – 6 kPa)   |
| Max. Flow Rate                       | 0.18 CFM (300 l/h)  |
| Safety Valve                         | Factory set at 1.02 psig (7 kPa) <u>+</u> 10%   |
| Output Air Dew Point                 | Better than -49° F (-45° C), at 68° F (20° C) ambient temperature, 80% relative humidity                      |
| Desiccant Regeneration               | Automatic by heating  |
| Regeneration Phase Interval          | Adaptive according to plant leakages  |
| Local Alarms                         | Power & system failures; low/high pressure; and high humidity   |
| Remote Alarms                        | The summary alarm is remotely signaled by an SPDT relay   |
| Optional Remote Monitoring Interface | 10/100 BaseT ethernet, auto-sensing with the following protocols: HTTP, TCP/IP, SNMP, TFTP, FTP, Telnet, DHCP |
| Outlets                              | 4 outlets standard (8 outlets available at additional cost)   |
| Low Pressure Alarm                   | Factory set at 0.15 psig (1 kPa), programmable from 0.07 psig (0,5 kPa)                                       |
| High Pressure Alarm                  | Factory set at 0.9 psig (6 kPa), programmable up to 1.02 psig (7 kPa)   |
| High Humidity Alarm                  | Set at 10% of relative humidity <u>+</u> 2%   |
| Standard Measures                    | Air pressure, Hour meter  |
| Optional Measures                    | Digital flow meter, pump rate   |
| Acoustic Noise                       | $\leq$ 50 dBA at 3.2 ft (1 m) distance and 5 ft (1,5 m) height  |
| Enclosure Degree of Protection       | IP20 according to IEC529  |
| Operating Temperature                | 14 – 122° F (-10° C / +50° C)   |
| Storage Temperature                  | -22 – 140° F (-30° C / +60° C)  |
| Power Supply                         | 100 – 240 VAC, 50/60 Hz   |
| Power Consumption                    | S W normal operation S W regeneration phase   |
| Weight                               | About 14.3 lbs (6,5 kg)   |
| Outlet Fittings                      | 3/8" (9,5 mm) diameter (other fittings on request)  |

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