



LAB4.50 DEHYDRATOR FOR WAVEGUIDES AND COAXIAL CABLES



key features

- output pressure programmable up to 60 kPa
- flow rate up to 300 NI/h
- dew point better than -45 °C
- two pumps and two drying chambers running alternatively
- continuous duty and automatic operation
- drying chambers automatic regeneration
- microprocessor control, LCD display, two buttons keypad
- low/high pressure, high humidity, power and system failures alarms
- local and remote alarm signalling
- output pressure, hour meter, alarms readout
- very low power consumption
- low acoustic noise
- high reliability and long life
- mounting: wall, floor, 19" and ETSI N3 racks

description

The LAB4.50 dehydrator provides continuous dry air flow up to 300 NI/h with a dew point better than -45°C . Output pressure is settable from 10 kPa to 60 kPa.

The LAB4.50 achieves reduced mechanical wear and noise and therefore a long lifetime by output pressure measurement, microprocessor control and pump speed regulation. Pumps speed control avoids mechanical pressure regulators thus eliminating undesirable pressure losses and a worse response to plant air flow regulation.

Two drying chambers contain the desiccant and dry airstream by adsorption 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 following devices are available on the front panel:

- 2x16 LCD
- two function keys
- two leds (power on, alarms)
- on/off outlet valves

The LAB4.50 provides front access keys to set the operating pressure at any time.

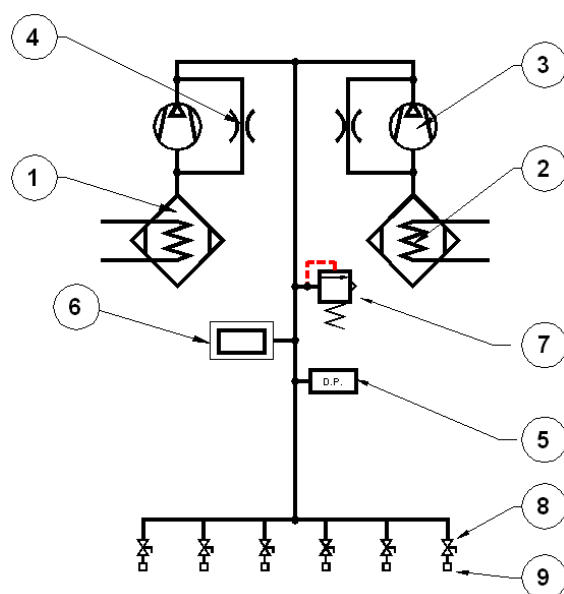
Output pressure measurement and hour meter values are indicated on the LCD.

The basic version offers low pressure, high pressure, high humidity, power and system failures alarms. All the alarm messages are locally signalled by the display and are remoted by one SPDT relay.

Power supply and alarm remote connectors, outlets with hose-tail fittings are available on the rear panel.

The LAB4.50 always includes wall, floor, 19" and ETSI N3 rack mountings.

pneumatic scheme



- 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

performance

Output pressure	:	Programmable from 10 kPa to 60 kPa
Maximum flow rate	:	300 NI/h
Safety valve	:	built in, factory set at 70 kPa
Output air dew point	:	better than -45°C at 80% RH at 20°C
Regeneration	:	automatic by heating
Local alarms	:	low pressure, high pressure, high humidity, power and system failures alarms
Remote alarms	:	all the alarms are remotod by SPDT relay
LED indications	:	power on, alarms
Readouts	:	output pressure, low/high pressure alarm thresholds, hour meter
MTBF	:	higher than 165000 h, according to MIL HDBK 217F at Ground Base conditions, 25°C ambient temperature, 50% flow rate
European Community Directives	:	2006/95/EC "Low Voltage Directive" 2004/108/EC "Electromagnetic Compatibility Directive"
Safety Normative	:	EN 60950-1 "Safety of information technology equipment"
Electromagnetic Compatibility Normative	:	EN 55022; EN 55024
Environmental compliance	:	2002/95/EC (RoHS) 2002/96/EC (WEEE) 1907/2006 (REACH)
Quality assurance standard	:	ISO 9001

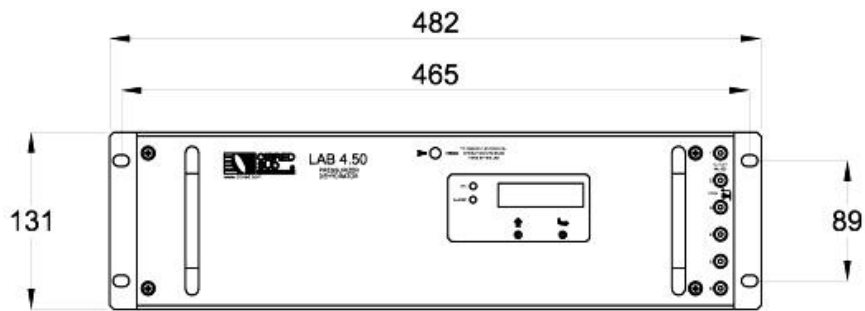
electrical specifications

Power supply	:	220-240 Vac, 50/60 Hz
Power consumption		
normal operation	:	< 30 VA
regeneration phase	:	< 80 VA

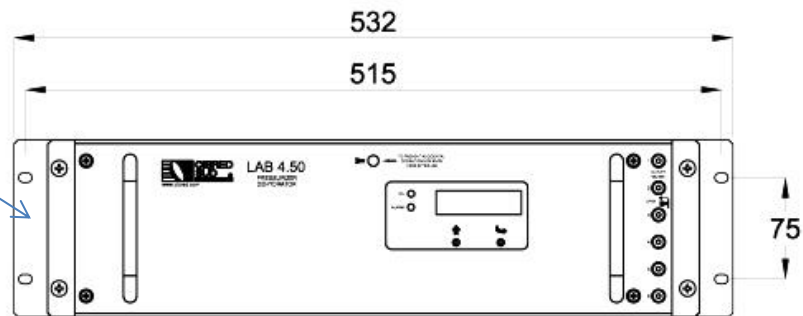
mechanical and environmental characteristics

Temperature °C (°F)		
Operating	:	-10 to + 50 (+14 to +122)
Storage	:	-30 to + 70 (-22 to +158)
Mountings	:	Wall, floor, 19" and ETSI N3 racks
Acoustic noise	:	≤ 50 dBA
Dimensions mm (in)		
Wall and floor mounting	:	width 482 (19.0) height 131 (5.2) depth 305 (12.0)
19" rack mounting	:	width 482 (19.0) height 131 (5.2) depth 202 (9.0)
ETSI – N3 mounting	:	width 532 (21.0) height 131 (5.2) depth 202 (9.0)
Weight kg (lb)	:	8.5 (18.7)
Standard outlets	:	6 outlets, each with ON/OFF valve
Outlets fitting mm (in)	:	9.5 (0.37) diameter, others on request

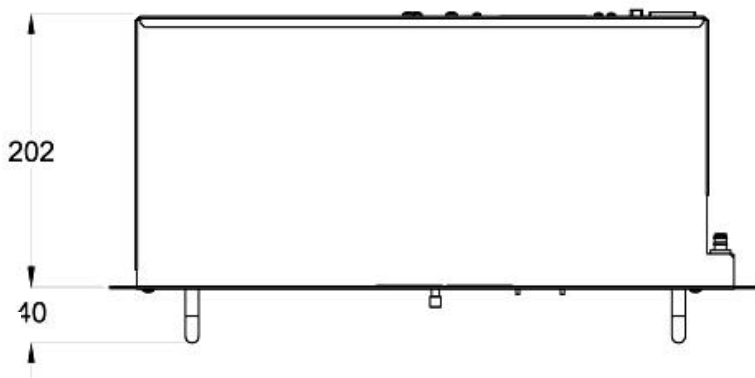
LAB 4.50



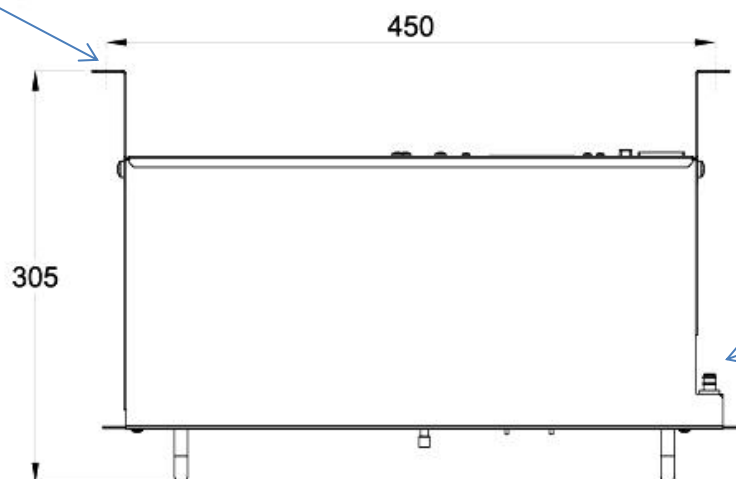
ETSI-N3 bracket



AC power and alarm connectors



Wall and floor mount bracket



Air outlets

Dimensions in mm

The equipment illustrated are fully equipped versions. CIBRED SUD reserves the right to modify without notice characteristics and data supplied herein.



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