CryoPump 2000A

Automatic LN_2 Dispenser



CryoPump 2000A is an automatic liquid nitrogen dispenser, to discharge liquid nitrogen from dewar to the application.

CryoPump 2000A is an ideal device to cool detectors of Bruker or Shimadzu Fourier Transform Infrared Spectrometer (FTIR), and compatible with most FTIR detectors.

Features

- Time interval can be preset for automatic fill
- Gentle liquid nitrogen flow, free of splashing or vibration
- No direct contact with liquid nitrogen for safety
- Full automatic control for easy operation
- Low evaporation rate during standby
- Can be connected to a computer for monitoring and data record
- Compatible with Antech CryoTrans 35P (standard) or CryoTrans 50 (customized) liquid nitrogen dewar

Working principle

By heating liquid nitrogen in bottom of the dewar, an overpressure is built inside of dewar, to allow liquid nitrogen rise out of the pipeline and create a gentle liquid flow.

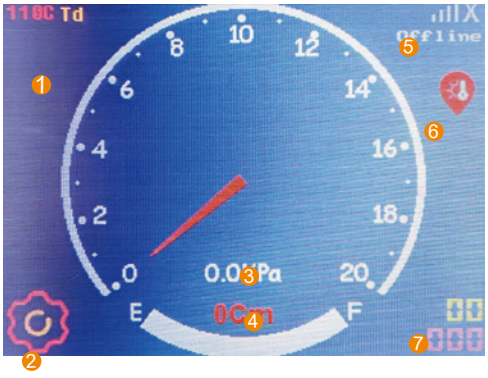
Filling time interval is adjustable, to match holdover time of detector. The filling flow is stable and gentle. As soon as the detector is full, the filling stops.



Controlling System

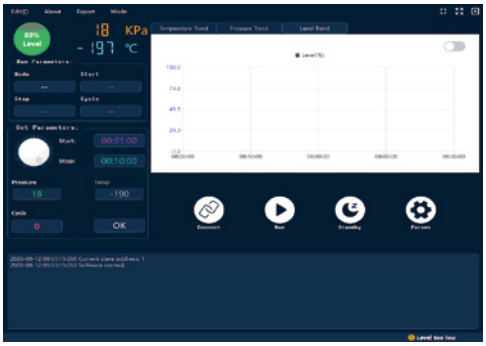
Touch screen controller on top of pump, displaying running status. All parameters can be set on touch screen, which is convenient to use.

- 1.Td: temperature of Dewar (liquid nitrogen source)
- 2.Setting
- 3.Pressure value
- 4.Liquid lever value
- 5.Wi-Fi status
- 6.Temperature sensor failure
- 7.Running information



Control on PC:

CryoPump 2000A is also supplied with controlling program for computer, to monitor its working status and make settings according to the demand.



Specification

Model	CryoPump 2000A
Static evaporation rate	< 0.5 liters per day
Flow rate	0~1L/min
Maximum working pressure	< 20 KPa
Reaction time	+/- 1 minutes for cooling down the fill line (with 2 meters fill line)
Power connection	100-240V AC
Power consumption	average 10W, during pumping 110W
Standard fill line	8 mm OD, 5 mm ID PTFE tube, with 32mm foam insulation
System includes	Pump, fill line 2 m, phase separator, power supply cables, 1 level sensor, 1 temperature sensor
Working modes	Automatic fill control
Software	Monitor software on PC
Alarms	High/low temp; High/low liquid level; High dewar pressure; Pressure sensor failure
Net weight(kg)	3.5
Gross weight (kg)	5.3
Dimensions(mm)	250*100*825
Packing dimensions(mm)	380*180*980