



NEPS1000® Advantage

Nitrogen Purging System

We prevent Moisture Damage

The NEPS 1000® Advantage is the latest development for improving the effective and efficient use of dry nitrogen, which purges electronic, optical, high voltage laser systems, and equipment requiring gas drying and inhibiting of oxygen.

The Complete Purging System

The NEPS 1000® Advantage is designed to maximize the dry gas purging process for humidity removal,

with a host of capabilities and functionality for effective and efficient control during the purging operation.

Easy Operation

NEPS 1000® Advantage is fully self-contained. Simply connect a dry gas source to the inlet connection and the equipment port. The NEPS 1000® Advantage is ready to operate.



Specialist Purging Technology

Economic Gas Use

One of the **NEPS 1000® Advantage** benefits is its use of the purge gas used for purging. By using a single pipe connection the purge gas is controlled and dispersed throughout the instrument or system being purged. During the depressurization phase of purging the purge gas is isolated.

User-Friendly

The **NEPS 1000® Advantage** has easy-to-use selectable programming, which can be set to view process control values and display dew point measurements in °C or °F with pressure in Kpa or psi. Highly visible liquid crystal displays provide constant information and readouts during operation and use.

Equipment Leak Testing

The **NEPS 1000® Advantage** comes with a selection of three built-in leak testing capabilities to verify the sealing standard of the equipment to be purged. Pressure testing can be conducted in pressures of 10.3 Kpa (1.5 psi), 17.2 Kpa (2.5 psi), and 34.5 Kpa (5.0 psi). Pressure leak/rate display resolution is 0.01 psi.

Gas Quality Testing

The dryness of the gas is important to the effectiveness of the purging operation and the **NEPS**

1000® Advantage dew point monitor can be used to check the dryness of the gas prior to commencing the purging operation.

Universal Voltage

The **NEPS 1000® Advantage** can be operated globally. Voltages and frequencies range from 100 to 230 VAC at 50-60 Hz.

Single Connection Purging

Traditional conditioning with dry nitrogen, gas or air depends on the flow of gas from an entry connection to an outlet port. In this mode the gas will follow the simplest and easiest path to the outlet connection. This can often lead to “pockets” of unconditioned gas.

Using **NEPS 1000® Advantage** the mode of operation changes to a more efficient single connection purging process, which also uses a choice of three selectable pressure cycles to ensure the dry gas influences all the space volume within equipment.

There are two states in the purge cycle. In state one, the unit under test (UUT) is connected to the supply gas until the selected psi is reached. In state two, the unit is connected to the exhaust line until zero psi is reached. The **NEPS 1000® Advantage** cycles between these two states until the selected dew point is achieved.

AGM Container Controls offers a comprehensive range of purging instruments for moisture removal in equipment and systems to prevent condensation and humidity damage.

Key Features & Benefits

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| 1 Easy-to-Use Single Connection Purging | 6 User-Programmable |
| 2 Dewpoint and Pressure Readout | 7 NATO Approved |
| 3 Dewpointstat Gas Control | 8 Remote Dew Point Sensing Option |
| 4 Portable and Robust | 9 Dew Point Display from +20°C to -80°C |
| 5 Automatic Operation with Minimal User Input | 10 Maintainable Online |

What is Dewpoint?

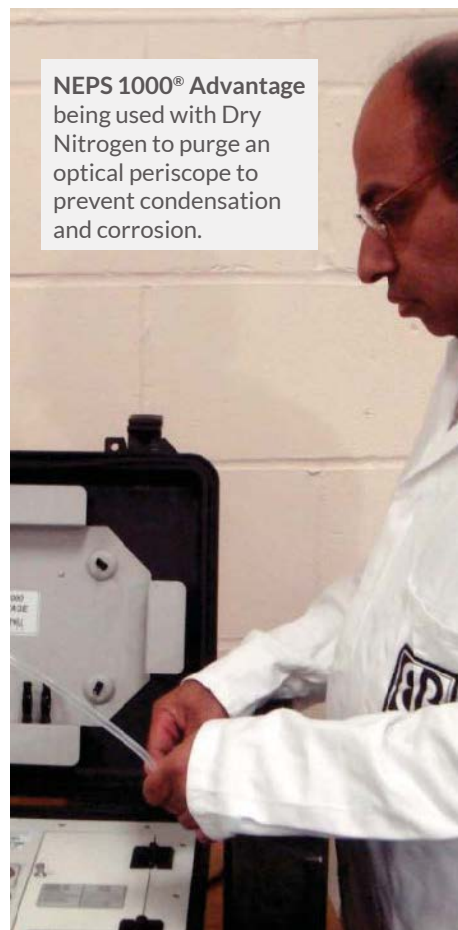
The temperature to which air or gas must be cooled for the formation of condensation or frost. This means dew point is ideal for stating the quality control requirement for purging an instrument or enclosure.

Why Purge?

Modern systems that use printed circuit boards, wires, electronic components, rubbers and plastics in their construction will have potentially significant amounts of moisture. The amount of hygroscopic moisture can be significant in comparison to the moisture (water vapor) contained within the air.

The Use of Nitrogen

Nitrogen is a stable and safe gas which fails to support combustion and has little or no reactive capability with other elements when compared to oxygen. Nitrogen gas is widely used for nitrogen blanketing to prevent moisture adsorption and product deterioration.



NEPS1000® Advantage Applications

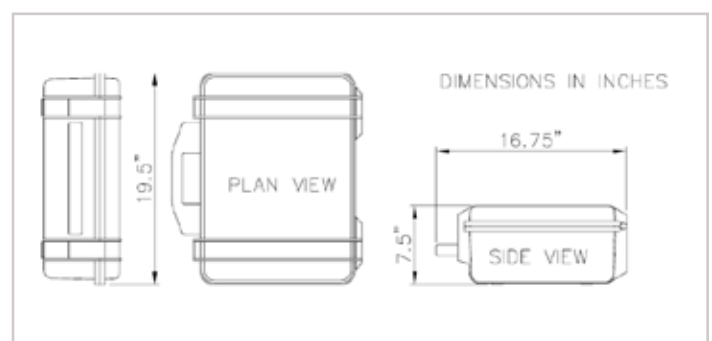
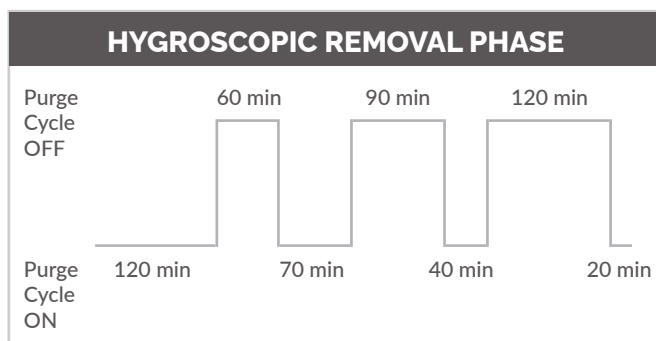
Optical Instruments
LASER Systems
SF6 Switch Gear
Printed Circuit Board Conditioning
Double Glazing Cavities
Electronic Housings
Workstations
Storage Containers
Surveillance Instruments
Underwater Equipment
Thermal Imaging
Image Intensifiers

NEPS 1000®
Advantage enables better operation and long-term reliability of moisture-sensitive instruments and systems.

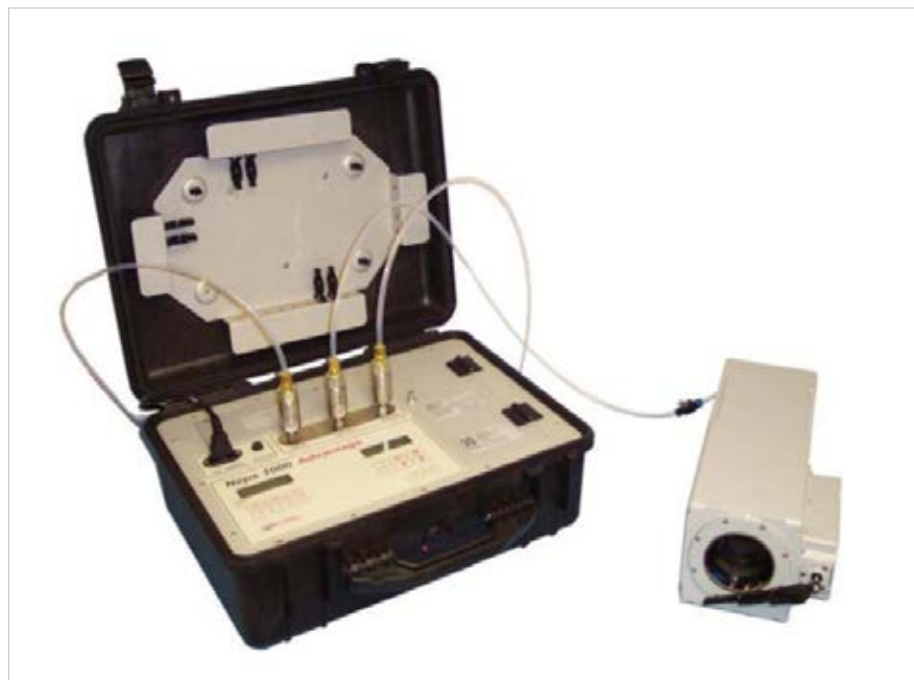
NEPS 1000® Advantage Dewpointstat

The Dewpointstat feature of **NEPS 1000® Advantage** enables users to determine the amount of moisture contained within equipment and to implement an optimized gas and purging procedure for production control.

Using the remote dew point sensor option the **NEPS 1000® Advantage** monitors the progress of the dew point dryness within the equipment being purged. It then switches off and isolates the dry gas when the selected dew point is achieved. (See graph below)



NEPS 1000® Advantage
being used with dry nitrogen
to single point purge a
camera to a dew point of
-40°C as part of a routine
maintenance schedule.



Technical Specifications

Usable Gases	Air, Nitrogen, SF6, Helium, Argon
Selectable Pressure Ranges	10.3 Kpa (1.5 psi) 17.2 Kpa (2.5 psi) 34.4 Kpa (5.0 psi)
Display Range Pressure	0 to 34.4 Kpa (0-5.0 psi)
Display Range Dewpoint	(Selectable) +20°C to -80°C dewpoint +68°F to -94°F dewpoint
Resolution	0.1°C dewpoint
Accuracy	± 2°C dewpoint
Data Output Pressure	0 - 5 volts
Data Output Dewpoint	0 - 5 volts
Power	100 - 230 volt 50 - 60 Hz

Power Consumption	3 amps
Dimensions (mm)	490W x 425D x 190H (closed)
Weight	10 kg (23 lbs)
Ingress Protection	IP54 (closed case)
Operating Temp	-10°C to +50°C (14°F to 122°F)
Storage Temp	-50°C to +65°C (-58°F to 149°F)
Proof Pressure	Input 137 Kpa (20 psi)
Flow Rate (typical)	20 liters per minute (0.71CFM)
Optional Extras	See NEPS Accessories
NATO Stock NSN	4440-99-551-4115
Order Code	N240-AGM

Form 7.2.64B