

# DryCal® Nexus



## Standardization Data Logging and Communication Module

The DryCal Nexus standardization, data logging, and communication module expands the power and versatility of the DryCal DC-Lite primary air flow meter. When used with a DryCal DC-Lite for flow calibration, Nexus provides time and date stamping, pump, employee and sample ID numbers and volumetric flow rate readings. In order to make monitoring and recording flow stability easier, readings can also be taken at user-defined time intervals. Optionally, the Nexus NS can provide flow rate readings corrected for standardized temperature and pressure.

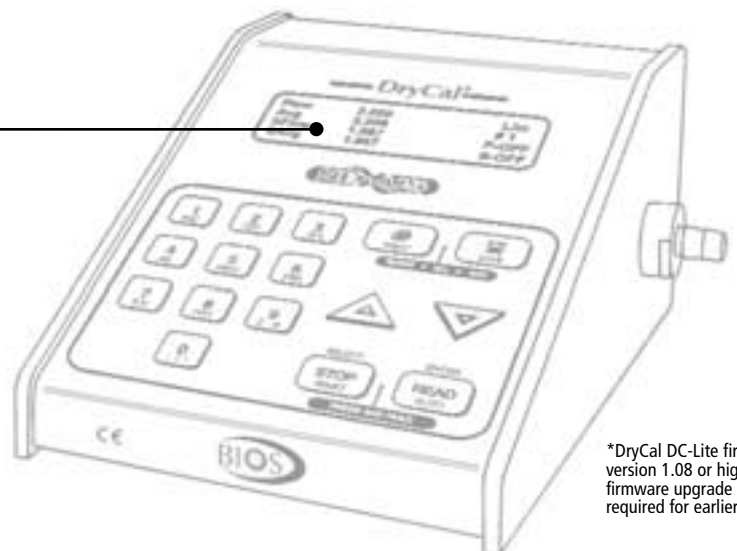
Nexus allows the user to print or export data immediately or save in non-volatile memory. The data storage capability allows employee sample records to be stored in the unit's memory. The records can be conveniently downloaded through a serial port or printed via a parallel port at a later time.

The DryCal Nexus works seamlessly with DryCal DC-Lite primary flow calibrators.\*

- Compact Size
- Data Storage, ID Data Entry
- Time and Date Stamping
- Download, Print or Store Data
- Create Alphanumeric Calibration ID's
- Optional Temperature/Pressure Corrections
- Optional NIST Traceable Certification



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\*DryCal DC-Lite firmware version 1.08 or higher. A firmware upgrade may be required for earlier models.

**DryCal® Nexus  
 Communication Module**

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## FEATURES:

### Data Storage—

Stores sampler flow readings in non-volatile memory. The NEXUS allows for entry of employee, pump and sample ID numbers and names. The unit can also be set to assign a sampler ID number.

### Time and Date Stamping—

Provides a secure sample audit trail.

### RS-232 PC Data Logging Interface—

Downloads data directly to a PC.

### Built-in Parallel Port—

Interfaces with most IBM® compatible printers.

### Operates from Power Supplied by DC-Lite—

Or, optionally from AC power using included AC adapter.

### Large Alphanumeric Display (LCD)—

Indicates the volumetric flow rate and the average flow rate. Optionally indicates the flow rate corrected for standardized temperature and pressure and the average corrected flow rate. User may define the averaging sequence number up to 100. (The default number of readings in an averaging sequence is 10.)

### Flow Readings Corrected for STP\* —

Optional feature allows the user to expand the capabilities of any DryCal® DC-Lite to include STP functions. The unit automatically measures conditions in the flow stream and corrects readings to standardized conditions.

### NIST Traceable Certification\*

Dimensional, timing, temperature, and pressure accuracy traceable to NIST standards.

### CE Approved

NEXUS NS module only

*BIOS develops powerful technologies for flow measurement and sampling of airborne chemical hazards. The performance features found in the BIOS line of equipment offer convenience, versatility and the assurance of valid data.*

Visit our website at: [www.biosint.com](http://www.biosint.com) for:

• Specifications • Features • Manuals • Pricing

## SPECIFICATIONS:

**Size:** 3" x 4" x 6" / 76 mm x 102 mm x 152 mm

**Weight:** 32 oz. / 914 g

### Temperature Sensor Accuracy: (NS model only)

Accuracy (calibration, linearity, and quantization) as percent of Kelvin temperature

	Typical	Maximum
293 - 303 °K (20 - 30 °C)	± 1.1%	± 1.4 %
273 - 323 °K (0 - 50 °C)	± 1.3%	± 2.1 %

### Atmospheric Pressure Sensor Accuracy: (NS model only)

Accuracy (calibration, linearity, and quantization) as percent of Kelvin temperature

	Typical	Maximum
293-303 °K (20 - 30 °C)	± 0.4 %	±0.8 %
273-323 °K (0 - 50 °C)	± 0.6 %	±1.5 %

### Standardized (Corrected) Accuracy: (NS model only)

This represents the accuracy of the DryCal/Nexus combination in the DryCal optimum (±1% volumetric) flow range when reading standardized flow (SLPM). These values were calculated from the above temperature and pressure inaccuracies and the best-case error of the DryCal using the root-sum-square method.

	Typical	Maximum
293 - 303 °K (20 - 30 °C)	± 1.1%	± 1.4 %
273 - 323 °K (0 - 50 °C)	± 1.3%	± 2.1 %

### Printer Port: Standard parallel (IBM Centronics, compatible with most printers)

Note: Not compatible with printers that require Microsoft Windows™

### Serial Port: Standard NZR data format, 9600-baud rate, 8 bit data, 1 start, 1 stop, no parity

**Power Source:** Power supplied from the DC-Lite via connecting cable. Optional AC power using the DC-Lite single-station adapter. Input 100 to 120 VAC. 60 Hz. Output: 12 VDC (Optional input: 200 to 240 VAC)

### Temperature Range: 0-55 °C

### Warranty: 1 year

All specifications are subject to change. Please contact Bios or visit our web site at: [www.biosint.com](http://www.biosint.com), for the most current information.

## A Companion Product

### DryCal® DC-Lite

#### Primary Calibrator/ Piston Prover for Primary Flow Verification and Field Audits

Check out the next generation "dry" primary air flow meter from Bios. The DryCal DC-Lite offers low cost, light weight and an ultra-compact size. This calibrator is flow source pulsation, without the need for in-line dampers. An ideal primary flow standard for industrial hygiene, environmental and laboratory applications. DC-Lite fits easily into a slim briefcase and requires No messy soap film solutions.

- Simple Push Button Operation
- Hands-Free Auto Mode
- NIST Traceable
- Fast
- Compact
- Dry Piston Technology



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