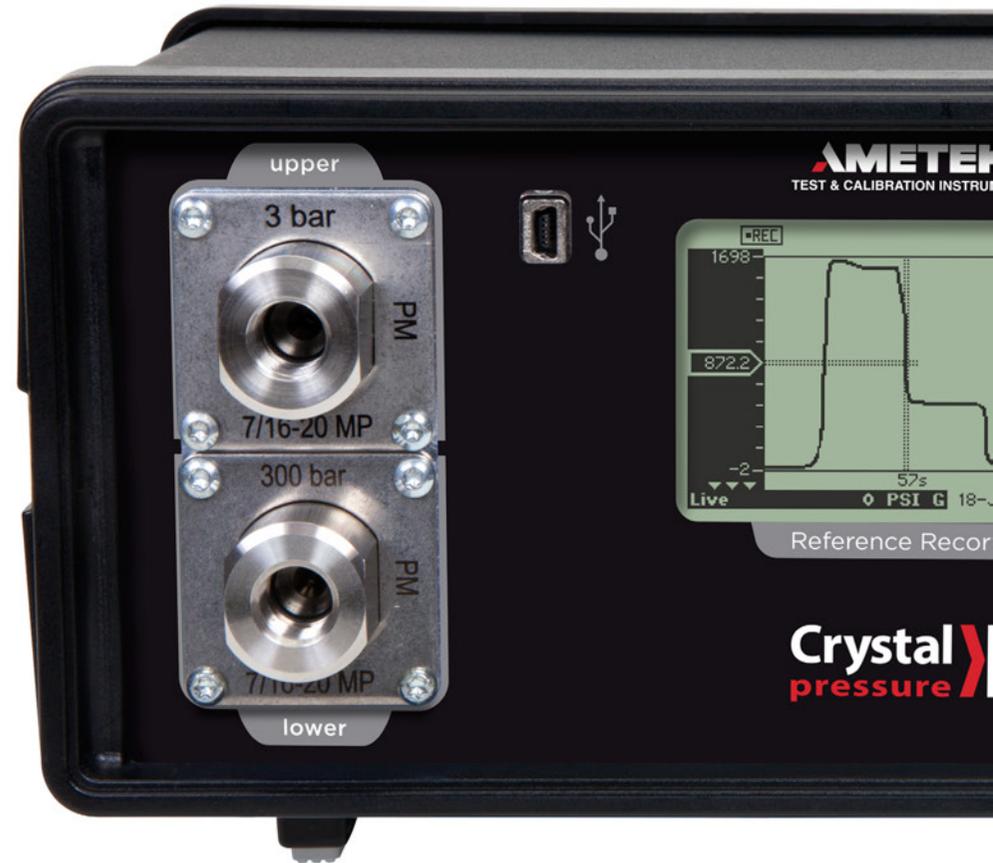


# nVision Lab Reference Recorder



# Your Multi-Purpose Lab Reference

## All of the nVision Features in an Enclosure Suitable for a Workshop or Laboratory Environment.

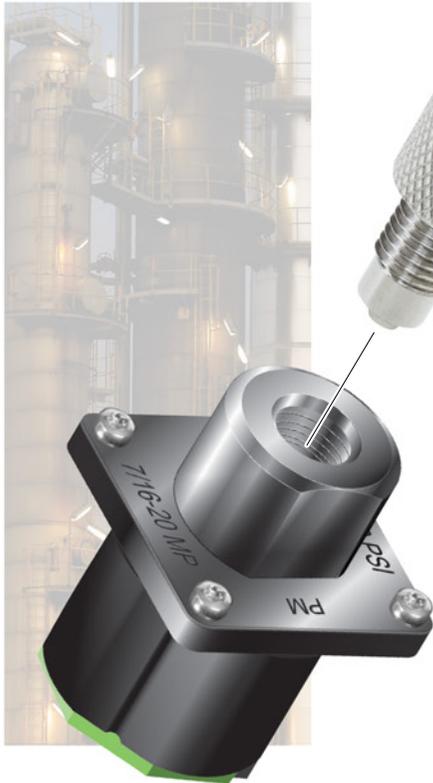
**T**HE CRYSTAL nVision Lab Reference is a pressure reference recorder accurate enough to function as a laboratory deadweight tester replacement and a high-accuracy, high-frequency chart recorder. Download data as you test, view your data on the built-in LCD, and store up to 1 million data points.

### Key Features

- ▶ **High Accuracy**  
0.025% of reading.
- ▶ **Simple to Use**  
Intuitive keypad takes seconds to learn.
- ▶ **Multiple Measurement Options**  
Pressure, Temperature, mA, VDC, and Switch Test.
- ▶ **BARO Option**  
Switch between absolute and gauge pressure.
- ▶ **100–240 VAC Powered**  
50–60 Hz, with international adapters.



# Pressure Temperature & Current



## Pressure Module (PM)

Measure, calibrate, and record up to 15 000 psi with up to 0.025% of reading accuracy, in the field.



## Temperature Module (RTD100)

Works with 2-, 3-, and 4-wire Pt100 RTDs. Includes an IP67 rated, M8 connector terminal block.



## Current, Voltage, and Switch Test Module (MA20)

Measures 4-20 mA and 10-50 mA loops, DC voltage, and switch state. Each MA20 module comes with a super flexible, silicone 2mm test lead kit.

# Bench Top or Rack Mount

Crystal  
pressure

## Applications

- ▶ Calibrate pressure transducers, switches, transmitters, and gauges.
- ▶ Calibrate natural gas correctors and flow computers.
- ▶ Pressure relief valve testing.
- ▶ Leak testing with simultaneous graphing of pressure and temperature.
- ▶ Temperature monitoring and recording.



## FITTINGS FOR LIFE™



Crystal Pressure Fittings<sup>♦</sup> are machined in high-strength 316 Stainless Steel to operate at 10 000 psi / 700 bar.

- ▶ Purpose designed for testing and calibration.
- ▶ Self-venting weep hole alerts you before you disconnect from a pressurized system.
- ▶ 2 seals: Use fingers for an o-ring seal, or a wrench for a metal to metal cone seal, down to -40°C.

## NPT Quick Test Adapters

- ▶ Choose from a selection of common replaceable adapter fittings, or use our quick test fittings to build your own multiport manifold. No thread tape required!
- ▶ Visit [crystalengineering.net/cpf](http://crystalengineering.net/cpf)

<sup>♦</sup> U.S. Patent No. 8,794,677



**AMETEK**<sup>®</sup>  
TEST & CALIBRATION INSTRUMENTS

# Visualize Your Data

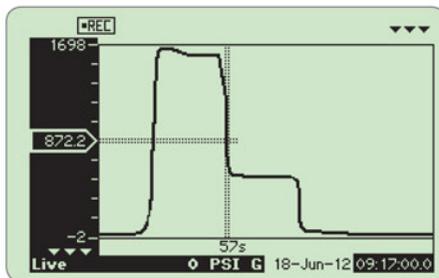
## See Changes As You Record

Examine your data graphically while you record your test.

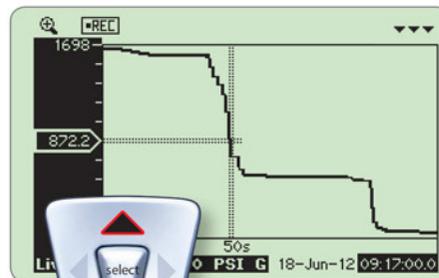


## Zoom and Pan Across Data

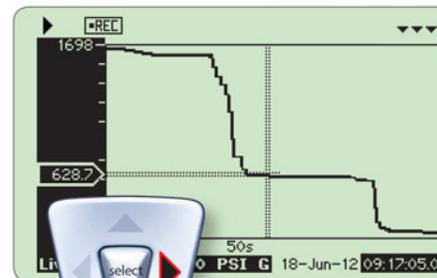
Take a closer look. Use the arrow keys to inspect the details of your last data run.



Original View



Zoom...



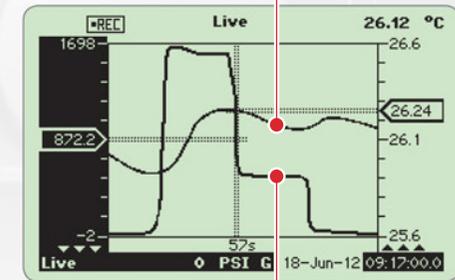
and Pan.

## Multiple Data Views

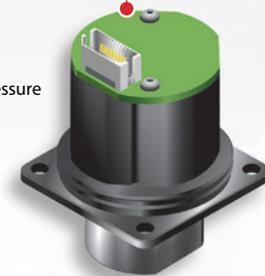
View data from each module separately, or combine the data from both modules into one graph.



Temperature



Pressure



# Crystal Control

## Your Device, Your Way

Customize, secure, and configure your nVision with the included CrystalControl software. Access, view, and export your data with DataViewer.

### ► Customizable Screens

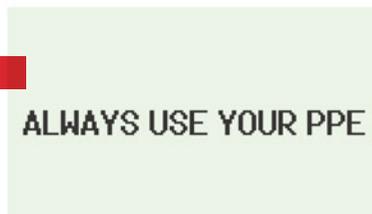
Sort, enable, and assign numbers to screens to match the way you work.

### ► Custom Units

Disable the units you do not need and define a custom unit for your application.

### ► Safety Start-up Screen

Prompt users to acknowledge a custom safety message with the press of a button, before using the nVision.



### ► Tamper-Proof Digital Records

Securely export your digital recording directly into an industry-standard, signed PDF.



### ► Record

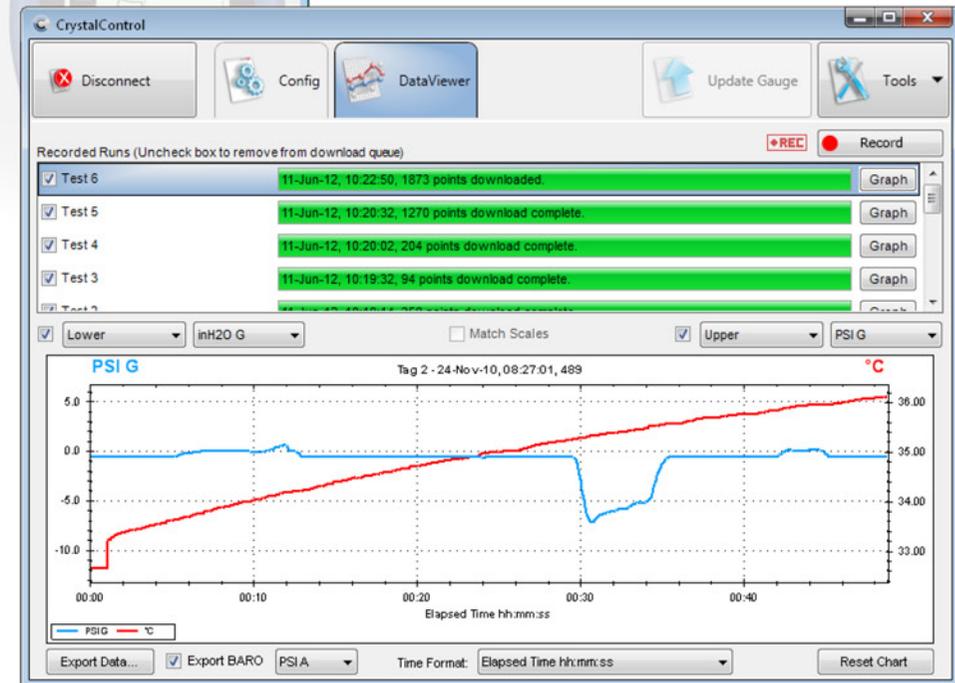
Start nVision recordings directly from your PC.

CrystalControl software is available as a free download at [crystalengineering.net/nvisionlab](http://crystalengineering.net/nvisionlab) ◀



## DataViewer

Graph & zoom in on any data run. Format your graph, then export to a signed or unsigned PDF, CSV, or Excel file.



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## Certifications



Crystal products include a factory calibration report that proves it meets its specifications over the operating temperature range. The products described herein, are calibrated in Crystal's accredited Calibration Lab (A2LA, Certificate #2601.01 ISO/IEC 17025) in an environmental chamber using fully automated equipment. Inclusion of the ILAC-MRA symbol does not imply certification or approval of the product itself, but rather refers to Crystal's accreditation as a calibration facility.

For detailed specifications go to the Data Sheet at [crystalengineering.net/nvisionlab](http://crystalengineering.net/nvisionlab)

**Crystal**  
pressure

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