

**Crystal**  
pressure **KK**

# Pressure is our Business



Count on gauges and calibrators that perform...  
**Wherever you work**





▶ **Reduce Measurement Error**

Protect against diminished accuracy from environmental conditions, accidental damage, and user error.

▶ **Lower Operating Costs**

Buy, maintain, and calibrate less equipment—year after year.

▶ **Increased Safety**

Crystal Technology sets a new industry standard for safety. Why take a chance?

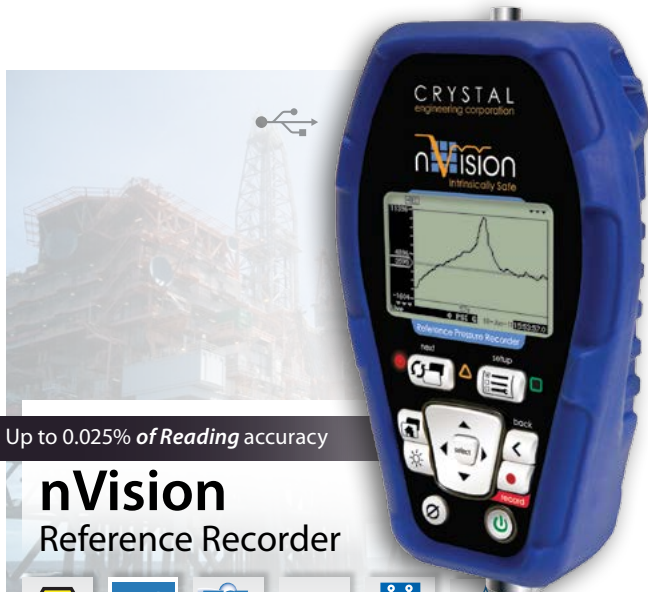
▶ **World-Class ISO 17025 Accredited Laboratory**

At no extra cost, every gauge includes an NIST Traceable certificate from our onsite calibration lab.

▶ **Prompt, Helpful Service**

Only Crystal Employees make you and your work their first priority, every day.

# Our Products



Up to 0.025% of Reading accuracy

## nVision Reference Recorder



- ▶ Replaces a deadweight tester *and* a chart recorder
- ▶ Gauge, absolute, and wet/wet differential pressure
- ▶ Temperature, current, voltage, & switch
- ▶ Comparative, real-time graphing
- ▶ Records 1 million data points at up to 10 readings per second



▶ nVision is also available in a Lab Reference Configuration



0.05% of Reading accuracy

## 30 Series Compact Calibrator



- ▶ High, low, & vacuum pressure sensors and milliamp indicator
- ▶ Easy to use
- ▶ Field proven worldwide since 1996
- ▶ Designed to calibrate transmitters
- ▶ Widest range, smallest size



0.1% of Reading accuracy

## XP2i Digital Test Gauge



- ▶ World's most popular test gauge
- ▶ Ultra-rugged
- ▶ One XP2i replaces 5 or more test gauges
- ▶ Records 32 000 data points with DataLoggerXP option
- ▶ Marine-grade enclosure resists corrosion
- ▶ Continuous recording for 1 year in Ultra-Low Power mode



0.2% of Reading accuracy

## M1

Affordable Precision



- ▶ Easy to read at any angle, day or night
- ▶ More durable than any mechanical gauge
- ▶ One M1 replaces 3 mechanical gauges
- ▶ 2-year battery life on 2 AA alkaline batteries
- ▶ Full-scale bar graph indicator
- ▶ Two year calibration interval



Leak-Free up to 10 000 PSI/700 bar/70 MPa

## CPF

Always Seals, Always Safe

FITTINGS FOR LIFE™



- ▶ Purpose-designed for testing & calibration
- ▶ Self-venting weep hole assures a safe disconnection from a pressurized system
- ▶ 2 seals: Use fingers for an o-ring seal or use a wrench for a metal to metal cone seal (good to -40° C)
- ▶ Laser marked: Thread type, size, and MAWP
- ▶ Directly compatible with HiP, Autoclave, and others



Everything you need for fast field calibrations

## Calibration

Kits and Tools

- ▶ 10-point up & down calibration in under 2 minutes
  - With CrystalCalXP calibration system and FastCalXP software
- ▶ Generate pressure precisely
  - From vacuum to 10 000 PSI/700bar/70 MPa
  - Hand-held and bench-top options available
- ▶ Complete field kits available
  - Including carrying case with room for your choice of fittings, pumps, and gauges or calibrators
- ▶ All you need for field calibration & testing
  - CPF fittings & hose
  - Weather-proof carrying case doubles as portable bench

# Applications



## Nuclear & Conventional Power Generation

- ▶ **Safety & Compliance Documentation** • Downloadable recorded data
- ▶ **Testing in Restricted Areas** • Simple, fast, customizable operation
- ▶ **Steam Generator Performance Testing** • Fast, safe, and easy!



## Municipal Water & Waste Treatment

- ▶ **Filter Testing** • Differential pressure recording
- ▶ **Sensor and Gauge Validation** • Highly accurate "of Reading" performance
- ▶ **Process Testing** • Fast read rates





## Exploration & Production

- ▶ **Wellhead Testing** • Unmatched accuracy up to 15 000 PSI/1000 bar
- ▶ **Tubing & Casing Pressure Graphing** • Simultaneous recordings from 2 sensors
- ▶ **Chart Recorder Replacement** • Long-term, continuous recording



## Transmission & Distribution

- ▶ **Hydro-static Testing** • Usable results while recording
- ▶ **Transmitter Testing** • Low differentials at high static pressure
- ▶ **Custody Transfer** • Highly accurate measurements to track your inventory
- ▶ **Pressure Switch Testing** • Fast, easy records of pressure switch testing



## Petrochemical Manufacturing & Refining

- ▶ **Intrinsically Safe** • ATEX & IECEx
- ▶ **Light Enough to Climb Towers** • Rugged enough to survive falls
- ▶ **Pressure Relief Valve Testing** • Fast read rates with a permanent record of each test



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Dear Customer,

In 1982, we began with a simple idea: "Pressure is our business." Since then, our unwavering goal has been to help you succeed. Day after day, we work harder, so you can work better. Year after year, we strive to surpass your expectations.

Take a moment, and look closely. You will find a Crystal pressure measurement instrument is the best tool to help you get the job done.

#### **Value**

In fact, you may find a Crystal gauge, recorder or calibrator is the most valuable tool you have ever owned—and for good reason.

One Crystal product often does the work of three to five other devices—replacing your data logger, your chart recorder, multiple test gauges, even a deadweight tester. With lower ongoing costs for calibration and repair, your purchase starts paying you back immediately. And now, Crystal instruments last even longer in harsh environments, with new materials and an IP-67 rating on most field units.

Above all, we believe in making things simple. Everything we make is easy to use and task-configurable, so you work and train faster. You might not even need a manual.

#### **Reducing uncertainty**

We also believe in being clear: about our capabilities, about our accuracy, about what you can expect from us.

We use Active Digital Temperature Compensation to ensure you have lab accuracy in nearly any outdoor climate—even under extreme temperature. We define our accuracy clearly, so you know where you stand without working complex calculations. And rather than inflating our performance—by shortening the calibration interval, for example—our specifications always apply for at least one year.

#### **Increased Safety**

Crystal Products are setting a new standard for safety. We design and test all our products, not only for everyday use, but for the moments when things go wrong.

Our Crystal Pressure Fittings and Hoses are certified by the Technical Standards and Safety Authority, and an ASME Inspector witnessed our proof-pressure testing. Inherently Safe ratings are factory-standard on all our calibrators. Our products withstand overpressure, warn users of potential accidents, and undergo regular destructive testing, because your safety is important to us.

Ask your colleagues. Someone near you uses our products. Compare our products to any other and see the difference. Our mission is to make sure you get the job done and the results speak for themselves. Crystal gauges work better in the field and in the lab—wherever you need them.

Sincerely,

The Crystal Team

For detailed specifications  
go to [crystalengineering.net](http://crystalengineering.net)



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