PACIFIC NDT
NEXT LEVEL IMAGING

PiX 1417HD NDT DR

DIGITAL RADIOGRAPHY SOLUTIONS FOR INDUSTRIAL USE

Contact us via email or phone to find out more or schedule an in-person demo.

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FLAT PANEL DETECTORS

PIX 1417HD

PiX 1417HD – High-Resolution Flat Panel Detector for Demanding NDT Applications.

The **PiX 1417HD** is a premium 100-micron digital X-ray detector purpose-built for industrial radiography professionals who require uncompromised image clarity, large field coverage, and compliance with global inspection standards.

Here are key benefits:

01 Ultra-High Image Resolution

With its finely tuned **100-micron pixel pitch,** the **PiX1417 HD** delivers detailed and high-contrast imaging—ideal for:

- Code-compliant weld inspections (ASME Section V, ISO 17636-2 Class B)
- Aerospace, Turbine Blades, and Precision machined parts
- Defect detection in high-reliability components

02 Code Compliance Confidence

The PiX 1417HD helps you meet stringent code-based imaging requirements where **IQI visibility and spatial resolution** directly impact pass/fail outcomes. This detector is especially suited for applications under:

- **ASME** and **ASTM** standards

03 Seamless Integration

- Works with the **PiX Software platform**—no additional license required if you're already using PiX 1417 NDT DR (139 µm)
- Simple upgrade path for labs seeking improved image quality without overhauling their workflow
- Compatible with most microfocus and minifocus X-ray sources

Key Features

- **Pixel Pitch:** 100 µm for high spatial resolution
- **Imaging Area:** 14" x 17" (Full field coverage for large welds or components)
- **Low Edge Space:** (3 mm) - when used without protective armor
- **Use Cases:** Aerospace, defense, petrochemical, pressure vessel manufacturing, turbine inspections
- **Portability:** Lightweight, durable design for field or lab deployment

Why Choose PiX 1417HD?

If your work demands **high-resolution imaging, code-driven performance,** and **system-wide compatibility,** the PiX 1417HD is the detector of choice.

Contact us today to schedule a demo or request pricing.

Conclusion

The use of Flat Panel Digital Detectors for industrial inspection represents a significant advancement in NDT technology. By offering superior image quality, adaptability, and efficiency, these detectors meet the complex demands of modern weld inspections, supporting industries in maintaining the highest standards of safety and quality.

PIX 1417HD VS. PIX 1417

PiX 1417HD NDT DR vs. PiX 1417 NDT DR: Understanding the Difference

Pacific NDT offers two high-performance flat panel detectors under the PiX 1417 lineup: the **PiX 1417HD** with **100 µm pixel pitch,** and the **PiX 1417 NDT DR** with **139 µm pixel pitch.** Both detectors are designed to deliver excellent image quality for industrial radiography applications, but they serve slightly different use cases based on resolution needs and code compliance requirements.

PiX 1417HD

PiX 1417

Feature	PiX 1417 HD NDT DR (100 µm)	PiX 1417 NDT DR (139 µm)
Pixel Pitch	100 microns	139 microns
Best for	Code-driven, fine-feature NDT	General-purpose industrial NDT
Code Compliance	Ideal for ASME, ISO Class B	Sufficient for general ISO/ASTM
Resolution (MTF)	Higher spatial detail	Moderate detail
Software License	Shared	Shared

If your inspections are governed by **strict resolution standards or fine-detail imaging needs,** the **PiX 1417HD (100 µm)** offers a clear advantage. For high-throughput or general-purpose inspections, the **PiX 1417 NDT DR (139 µm)** provides excellent value and performance.

Both detectors work seamlessly under the same PiX Software license, offering unmatched flexibility for evolving inspection

SPECIFICATIONS

PIX 1417HD

Imaging Specifications

Model Name	PiX 1417HD
Technology	a-Si TFT with photodiode
Scintillator	Gadox or CsI
Pixel Matrix	3532 x 4302 pixels
Pixel Pitch	100㎛
Imaging area size (mm)	353 x 430
Limiting Resolution (lp/mm)	5
A/D Conversion	16-bit
Trigger Mode	1. Software trigger 2. Bluetooth interfacing with X-ray 3. AED (Automatic Exposure Detection)
Input Voltage	12VDC, MAX 45W
Power Consumption (Max.)	1. Operating with Charging: 45W 2. Operating: 20W
Data Interface	1. 1G-Ethernet 2. WiFi (802.11 n/ac) 2x2 MIMO

*Specifications are subject to change without prior notice.

SPECIFICATIONS

PIX 1417HD

Mechanical Specification

External Dimension (mm)	435.5 x 457.2 x 20 (H x W x D)
Weight (kg)	3.9
Edge Space Distance (mm)	3
Detector Housing Material	Aluminum
Pixel Pitch	100㎛
Sensor Protection Material	Carbon Fiber
Weight Limit	Uniform load: 150kg; Point load: 100kg Φ 40mm (1.6 in.)
Ingress Protection	IP67

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Battery Pack Specifications

Model	EVS-MBP-Y
Cell Type	Lithium Polymer
Number of Cells	2S1P (2series 1 Parallel) x 2 (Dual Battery System)
Rated Power Supply	Output: DC +7.4 V
Lifetime	Approx. 500 cycles of use (1 cycle = complete charge & discharge)
Dimensions (mm)	163 x 148 x 7
Weight (kg/lb)	0.24/0.528 (each)

Operating/storage environment

Be sure to use and store the equipment under the conditions described below.

	Operation	Storage	Transit
Temperature	-20 to 50°C (-4 ~ 122°F)	-20 to 55°C (-4 ~ 131°F)	-20 to 55°C (-4 ~ 131°F)
Humidity	10 to 90% RH (Non-condensing)	10 to 90% RH (Non-condensing)	10 to 90% RH (Non-condensing)
Atmospheric Pressure	700 to 1060 hPa	500 to 1060 hPa	500 to 1060 hPa

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