Waygate Technologies
a Baker Hughes business

Rugged quality, precision imaging

DXR140P-HC | DXR75P-HR detectors

Customer driven leadership in industrial radiography

Some things don't change: like the need in non-destructive testing (NDT) for reliable, high-quality, fast and easy imaging. But that doesn't mean we can't do better. With the next-generation DXR wireless portable detectors Waygate Technologies, has developed a new direct radiography (DR) platform that combines the latest technical advances with extensive customer insight.

The result is a range of DR detectors that meet the strictest ISO standards, designed specifically for the demands of different industrial applications. Rugged inside and out, they offer the high quality and fine details an inspection task requires, from corrosion monitoring to weld inspection and everything in between. Easy to transport and easy to operate, they offer a complete solution for safe, high quality imaging, even in the harshest conditions.

High-quality, portable imaging for inspection of field installations:

- Rugged additional shielding for extended lifetime
- Easy to transport and handle
- Choice of wireless or wired use
- Wi-Fi range up to 100 meters
- Two hot-swappable batteries, for longer uninterrupted operation
- Dust tight and waterproof
- Compliant with prevailing standards, including ISO/ASTM
- Minimum backscatter and noise, maximum image quality
- Rhythm Insight RT acquisition and review analysis software
- Powered by Flash! automatic image processing technology

A new detector portfolio for high-quality industrial field operation

The new range of DXR detectors provide the high-quality, efficient imaging solution required for industrial field testing. The detectors have a reduced thickness that makes them ideal in situations with limited detector positioning freedom. Choose wired or wireless use for simplified operation that matches your needs under every circumstance.

Rugged inside and out

Dedicated to industrial use, the customer-driven design of the next generation DXR detectors offers a rugged reliability that perfectly fits the criteria for mobile inspection of installations.

Each detector comes in a rugged casing that guards against drops, knocks and even radiation. Additional layers of shielding in the detectors better protect them from the harmful effects of radiation, for a longer lifetime and consistent performance. The IP65 and IP67 rating (immersion up to 1 meter depth) ensures these detectors are suitable for all industrial environments.

A tailored flight case makes the package complete, and ready for safe, easy transportation.

Designed for high quality, efficient imaging in harsh field radiography conditions

DXR140P-HC

Large size, high contrast imager for all-purpose radiography

Ideal for corrosion monitoring in the oil & gas and energy industries, the DXR140P-HC detector offers high contrast with 140-micron pixel resolution. The increased dose sensitivity allows shorter exposure times and faster throughput.

The DXR140P-HC can be used with X-ray as well as isotopes, and is suited for general radiography applications, including (but not limited to):

- **Oil & gas and energy, in-service inspection:**
  - CUI
  - valve positioning
  - WT measurement
  - pipe support
  - boiler tubes
- **Casting inspection**
- **Aviation MRO**
- **Military and security**
- **Structure inspection:**
  - concrete, bridges, supports, ...
- **Science, art and archeology**
- **Power line inspection, GIS**

DXR75P-HR

Small size, high resolution imager for critical applications

The DXR75P-HR gives you the high, 75-micron pixel resolution required to distinguish fine details for critical applications. The detector supports ISO 17636-2 class B for weld inspection, offering precision imaging that meets the most stringent standards.

The detector's narrow width makes it ideal for imaging in situations with limited detector positioning freedom.

The DXR75P-HR is suited for critical applications, including (but not limited to):

- **Weld inspection in oil & gas, energy and aviation:**
  - transport pipelines
  - complex structures (spool)
  - boiler tubes
  - fuel pipes
  - pressure tubes
  - pressure vessels and storage tanks
- **Shipyard weld inspection**

Ready to inspect!

Each DXR is a complete solution, with:

- Detector, mounted in a ruggedized case
- Accessories for optional external front shielding
- Transport case
- Wi-Fi and wired accessories
- Four batteries with charger
- Workstation with Rhythm Insight RT acquisition and analysis software, powered by Flash!

Rhythm Insight RT advanced digital tools

Built on 15 years of experience and proven knowledge, Rhythm Insight RT offers a powerful, scalable, yet easy-to-use NDT acquisition and analysis platform, dedicated to industrial requirements, and powered by Flash!

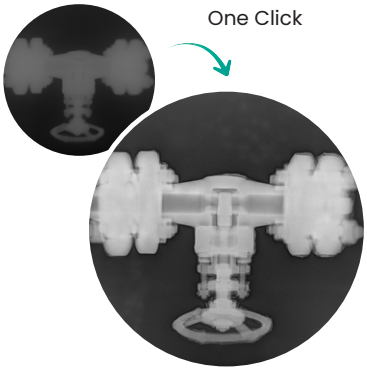
- Intuitive user interface for out-of-the-box scanning and image processing
- Touch user interface for optimal operation under all conditions
- Application-guided automation
- Powerful image quality validation tools
- DICONDE compliant

Technical specifications

	DXR140P-HC	DXR75P-HR
Pixel pitch (micron)	140	75
Detector size (incl. armor case & battery pack)	460 x 568 x 27mm (18,1 x 23 x 1,1")	268 x 358 x 38mm (10,6 x 14,1 x 1,5")
Detector active area	353 x 424 mm (14 x 17")	168 x 225 mm (7 x 9")
Detector weight (incl. armor case & battery pack)	9,2 kgs (20 lbs)	4,5 kgs (9,9 lbs)
Scintillator	Gadolinium oxysulfide (GOS)	Gadolinium oxysulfide (GOS Fine)
Environmental protection detector	IP65 & IP67	IP65 & IP67
Operating temperature	-20 °C to +50 °C	-20 °C to +50 °C
Drop test: 1 m	Passed	Passed
Grayscale	16 bit	
Communication	Wired or wireless (802.11n/ac)	
Power supply	DC +24 V (max 0.8 A) • Wired: power by SCU with tether interface cable • Wireless: powered by battery pack (2 x 3.100 mAh)	
Operating time	Up to 8 hours for imaging, 9 hours on standby	
Radiation hardness	> 1 kGy	
Compliance	ISO, AST, ASME, JIS and KS • DICONDE compliant (ASTM E3147) • Spatial Resolution Measurement conforms to ASTM E2597	

TO TK-630
SLOP TANK
TO PROD
WATER TANK

Powered by Flash! intelligent image processing technology



Combining 25+ years of experience and patents with next-generation technology, Flash! automatically, quickly and consistently optimizes your digital radiographs.

You get exquisite image quality and comfortable reading, with a faster, smoother workflow that enhances your productivity, maximizes your resources and gives your customers peace of mind.

SHARP

Next-level imaging

Selecting the right imaging hardware has a major impact on image quality – but the software you choose is just as important!

Flash! uses innovative, proven and leading image processing technology that offers high image quality. Images are made consistent, regardless of the operator, for easier reading and more confident reviewing.

SMART

A layered perspective

With Flash! you see more, with a clear vision of both high- and low-density areas, in a single image. Intelligent image processing automatically minimizes noise while maximizing details.

You can read images quickly, viewing all the layers in a glance without manual adjustments. No unsharp masking or edge enhancement creating artefacts. No over- or under-shooting around higher-density areas. No window leveling required. Flash! provides optimal image quality even whit minimal contrast. The invisible becomes visible, and the material no longer hides radiographic secrets from you.

SIMPLE

Good to go!

Flash! is **easy to learn** and use, and doesn't require specialized training. **Operator independent**, it automatically adjusts to variations in density, materials, geometry, radiation quality, etc. The software **saves time and effort** for operator and inspector, so you get more out of your human and material resources.

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