# CXDI-31 Specifications

| | | |
|---|---|---|
| Purpose | | General radiography |
| Method | | Scintillator and Amorphous Silicon (a-Si) sensor |
| Sensor | | Canon LANMIT2® (Large Area New-MIS sensor and TFT) |
| Pixel pitch | | 100 x 100 µm |
| Pixel | | 2,256 x 2,878 pixels (6,493,000 pixels) |
| Image size | | Automatic sizing up to 226mm x 288mm (9" x 11") |
| Grid | | Attachable (Canon CXDI grid) |
| A/D | | 14 bit |
| Grayscale | | 4,096 grayscale (12 bit) |
| Preview image access time | | Approx. 3 seconds after X-ray exposure (Actual times may vary due to various factors.) |
| Total image processing | | Approx. 20 seconds per image (Actual times may vary due to various factors.) |
| Interface | | DICOM 3.0, Ethernet 10/100 base T |
| Data output | | DICOM 3.0 compatible: |
| | | • Print Management Service Class (SCU) |
| | | • Storage Service Class (SCU) |
| | | (JPEG transfer syntax available) |
| Storage | | Temporary storage available in the Control PC |
| Voltage | | 100V, 120V, 230/240V (50/60Hz) |
| Power consumption | | 300VA maximum |
| Operation environment | | 10 - 35˚C (50 - 95˚F), 30 - 75% RH (no condensation) |
| Certification | | FCC Class A, UL 2601-1, EN60601, CE0197 |
| Dimensions, weight | Sensor unit | 324mm (W) x 327mm (L) x 20mm (H), 2.8kg (12.8" x 12.9" x 0.8", 6.2 lbs) |
| | Operation/Preview panel | 399mm (W) x 394mm (L) x 150mm (H), 6.6kg (15.7" x 15.5" x 5.9", 14.5 lbs) |
| | Control PC | 300mm (W) x 532mm (L) x 594mm (H) (11.8" x 20.9" x 23.4") |

## ■ User options

| | |
|---|---|
| Grid | Choice of 4:1, 8:1, 10:1, horizontal and vertical |
| Data input | Choices are: |
| | • DICOM Basic Modality Worklist Management Service Class (SCU) |
| | • DICOM Modality Performed Procedure Step Service Class (SCU) |
| | • Other non-DICOM HIS/RIS communication |
| | • Barcode |
| | For further details, please contact an authorized Canon agent. |



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Canon

*Digital Radiography*

# *CXDI-31*

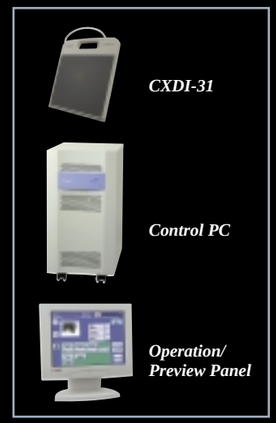

## INTRODUCING THE WORLD'S FIRST PORTABLE DIGITAL RADIOGRAPHY SYSTEM

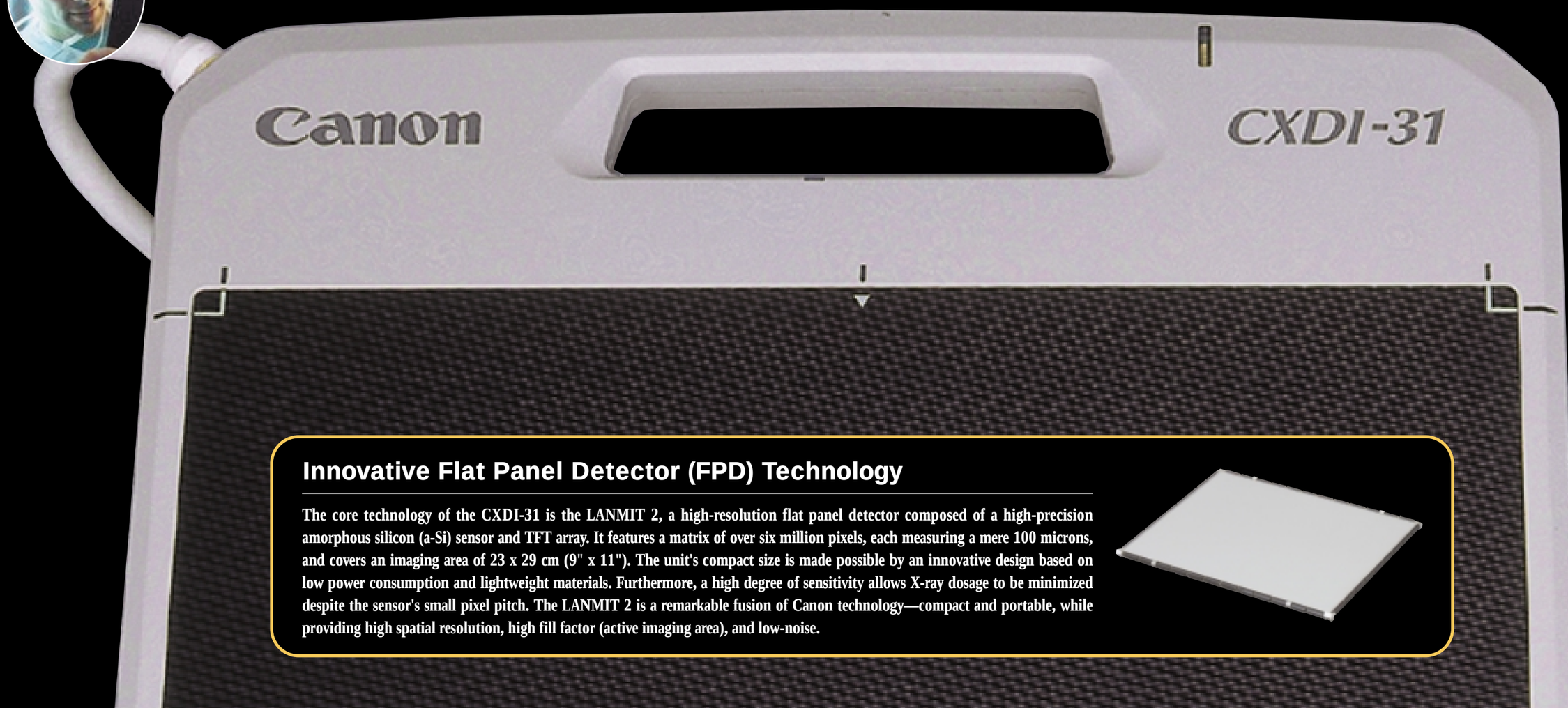
Canon once again sets the standard in innovative medical imaging systems with the CXDI-31, the world's first portable digital X-ray imaging unit. The CXDI-31 extends the benefits of Digital Radiography to a wider range of applications than ever before.

# Get the Advantages of the Portable CXDI-31 in Any Situation

Digital image capture in just three seconds and the elimination of film handling. Superior quality diagnostic images. And effective, on-demand network distribution of captured image data. The CXDI-31 provides all the great advantages of Digital Radiography, and improved flexibility. It is sufficiently compact and light enough for technologists/radiographers to set up—or even for patients to hold—which facilitates image capture from virtually any angle. And its portability makes it ideal for a broad range of imaging applications including trauma imaging. The CXDI-31 takes Canon's front-running technology one step further, offering a comprehensive set of benefits that conventional systems simply cannot match.

*CXDI-31*



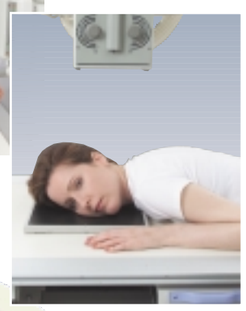

## Innovative Flat Panel Detector (FPD) Technology

The core technology of the CXDI-31 is the LANMIT 2, a high-resolution flat panel detector composed of a high-precision amorphous silicon (a-Si) sensor and TFT array. It features a matrix of over six million pixels, each measuring a mere 100 microns, and covers an imaging area of 23 x 29 cm (9" x 11"). The unit's compact size is made possible by an innovative design based on low power consumption and lightweight materials. Furthermore, a high degree of sensitivity allows X-ray dosage to be minimized despite the sensor's small pixel pitch. The LANMIT 2 is a remarkable fusion of Canon technology—compact and portable, while providing high spatial resolution, high fill factor (active imaging area), and low-noise.

# The Portable CXDI-31 Expands the Scope of Digital Radiography

## COMPACT

### The ideal unit in diverse situations

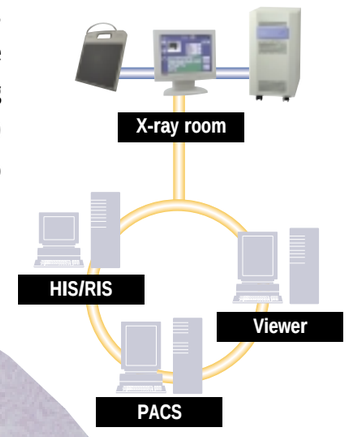


Thanks to its portable design—only 2cm (0.8") thick and weighing just 2.8kg (6.2lbs)—the CXDI-31 imaging unit can be freely positioned, just like traditional screen-film cassettes. This makes it especially useful for trauma imaging as well as neonatal, pediatric, and orthopedic applications. Patients who have limited mobility can also be readily x-rayed. The unit's compact size allows you to more easily capture images at angles that are difficult to set with fixed devices. It supports lateral and axial imaging of limbs, shoulders, the skull, the neck, and extremities. Quick positioning is another benefit, as the unit is light enough for the patient to hold in place. It may also be conveniently attached to a stand or simply placed on a tabletop.

## FAST

### Dramatically improved workflow

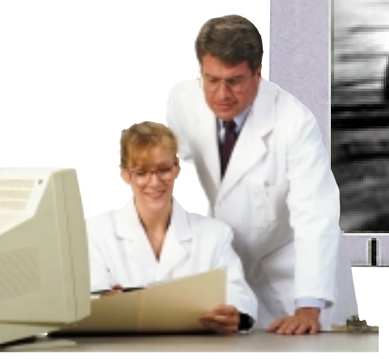
The CXDI-31 system's all-digital image capture process means that technologists/radiographers can complete the procedure in a few quick steps, resulting in reduced patient exam times. Here's how it works. First, if the CXDI-31 is connected to your hospital network (HIS/RIS), you can confirm patient data straight away on the system's Operation/Preview Panel. Next, set the target anatomical area using preset exposure conditions. In three seconds after X-ray exposure, a preview image appears on-screen for confirmation. The image can then be sent to a network destination—such as a viewing workstation, picture archive, or printer—via the DICOM 3.0 interface. As an added advantage, the CXDI-31 is ready to capture the next image right away.











*Actual Size*

## HIGH QUALITY

### Clear, high-contrast diagnostic images

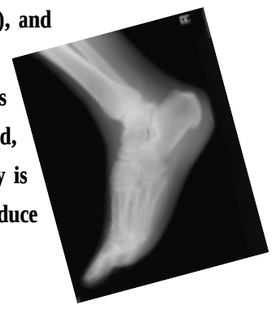


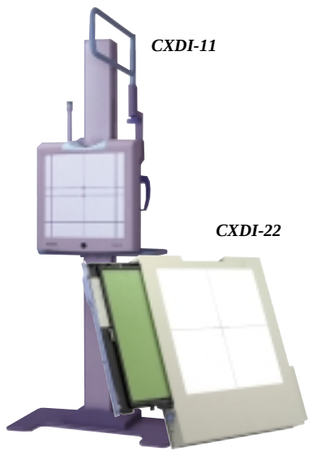
Image quality is another area in which Canon's Digital Radiography Systems excel. The CXDI-31 produces high-contrast grayscale images (4,096 gradations), and demonstrates improved NEQ (Noise Equivalent Quanta) characteristics. Also, the groundbreaking pixel pitch of only 100 microns contributes to excellent image resolution. Once an image is captured, different processing options are available to ensure that image quality is optimized for diagnostic purposes. This combination of features offers superior image quality and helps reduce the need for retakes, thus saving the patient from additional X-ray exposure.

## RELIABLE

### Technology you can count on

*CXDI-31*

The CXDI-31 is the latest generation in a lineup that includes the CXDI-11 Upright System and the CXDI-22 Digital Bucky System. These systems—used extensively by medical institutions in the United States, Europe, and Japan—are widely recognized as being reliable and cost-effective alternatives to traditional X-ray image capture devices. And now, the portable CXDI-31 builds on the foundations of this success. Like the other CXDI systems, the CXDI-31 has been wholly developed at Canon, using our expertise in many fields of technology. It combines Canon's long experience in radiology with industry-leading knowledge of semiconductor, sensor, image processing, and digital transmission technologies. The result is a cutting-edge solution that's ideal for critical medical applications.



*CXDI-11*

*CXDI-22*