# PRUDENT 1717/1417/1212

## PREMIUM WIRELESS FLAT-PANEL DETECTOR





HIGH TECHNOLOGIES FOR HIGH PERFORMANCE



DURABLE AND ERGONOMIC DESIGN FOR MOBILITY



USER FRIENDLY AND CONVENIENT FEATURES



## Prudent series detectors

are once again built on the technologies one step ahead to contribute high sensitivity, high performance and high reliability flat-panel detectors for imaging professionals.

PIXXGEN has been a pioneer introducing innovative technologies for flat-panel detectors.

From Auto Exposure Detection technology introduced in 2011, **PIXXGEN** has been equipped the new technologies with flat-panel detector such as 17x17inch cassette-sized detector, on-board storage and web-viewer. These technologies introduced by PIXXGEN now became the standard features of industry for the most of products available in the market

Various imaging sizes with robust and ergonomic design will allow the professionals to use the detector at any environment.

## High Technologies for high performance

#### Low Dose IGZO Non-Glass TFT

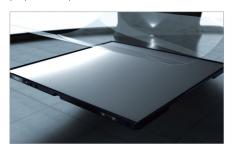


Specially designed IGZO TFT for High Sensitivity and robust Non-glass TFT

will bring you finest quality image and durability in any applications

The Prudent Series detectors adopted IGZO TFT and improved to produce a higher level of sensitivity at low X-ray dose.

The Prudent IGZO TFT significantly improves SNR (signal to noise ratio) over conventional a-Si or other IGZO TFT detectors. The new IGZO TFT improves MTF (modulation transfer function) and DQE (detective quantum efficiency) to show much clear and effective information on the images. In addition, Prudent Series detectors have adopted a TFT made of non-glass substrate, so that detectors can be operated in any mobile environment without any risk of physical impact.



#### **Enhanced AED®**



Expose the X-ray, there will be an image for sure Ultra high sensitive 2xAED

technology detects the X-ray with a new AED technology, and it significantly improves error and sensitivity generated during the detection compared to existing methods.

#### **Extended Battery Life**



The dual battery enables the detector to stay up to 14 hours in full operation.

The detector can be operated for an entire working day without extra charging.

Two batteries can be charged together at the same time through dual battery charger and charging batteries is also available while they are inserted inside the detector using various charging cables.



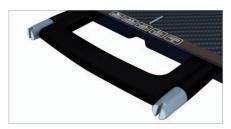












## Durable and Ergonomic design for Mobility

## 500kg Weight Bearing & 180kg Point Bearing



180KG

Prudent series detectors sustain up to 500kg on the whole surface and up to 180kg on 4 x 4 cm center loading.

## Easy Grips & Removable Handle

The grips and rounded edges located on each four side of the detector allow easy holding and lifting the Prudent Series. The handle, which can be mounted and detached without additional tools, helps the detector to be moved safely and conveniently.

#### **Light & Robust Design with IP67**



Metal frame made of Magnesium promises a high level of endurance

while maintaining ultra-light weight. Each edge of detector are protected against external impacts and daily use through robust metal edge covers & sophisticated design.

IP 67 Dust & Waterproof rating prevents any leakage of liquids including blood & urine and any dust into the detectors. And this allows easy cleaning of detectors with liquid cleaners without damage.

### User friendly and Convenient features

## Various & Simple Power Charging

The battery can be charged while installed within the Prudent series detector in two ways.

The waterproof USB-C ports on the detectors can be used for power supply and data transmission. This redundancy preserves the charging and data transmission capability of the detector. Waterproof magnetic cables and connectors are designed for flexibly which operators can maneuver the cables in any direction.

Prudent Series detectors also support Web Viewer technology which was introduced to the market for the first time by PIXXGEN and now became a technical standard for flat-panel detectors.

Web Base Viewer & Control

Acquired images can be viewed through any type of mobile devices based on iOS, Android or Windows in almost real time.

#### **On-Board Image Storage**

Up to 200 images can be stored in onboard storage of the Prudent detector in order to protect acquired images. In a mobile environment, the detector can acquire X-ray images in stand-alone mode without a console software. This function maximizes the mobility of the detectors by allowing the user to have X-ray images with a detector and X-ray source which is minimum equipment configuration.

#### **Status Monitoring OLED**

The OLED display provides information about Wireless/Wired connection status, Wireless Mode (AP), Battery level and IP address of the detector. The user can understand the detector status and take necessary actions if needed.



#### **Dual Battery Charger**

Battery can be charged while staying in the detector through power supply cables, however dual battery charger allows faster charging of two batteries at the same time.



#### **Anti-scratch Bump**

Each of the four corners and the bottom of the detector has anti-scratch bumps to help keep the product exterior clean.



## **Specifications**

Model		Prudent 1212	Prudent 1417	Prudent 1717
Application		General Radiography		
Conversion Screen (Scintillator)		Csl / GOS		
TFT Panel		IGZO TFT / a-Si TFT		
Pixel Pitch		140 µm		
Image Data (AD conversion)		Pure 16 bit		
Image Resolution		2,048 x 2,048	2,500 x 3,052	3,072 x 3,072
Image Size		12x12 inch (287x287mm)	14x17 inch (350x427mm)	17x17 inch (430x430mm)
On-board Storage		< 200 Images	< 150 Images	< 100 Images
Wired / Wireless communication		Gigabit Ethernet / IEEE 802.11ac		
Trigger Mode		High Sensitive 2xAED (Auto Exposure Detection)		
Calibration Mode		ACC (Auto Calibration Control) / Manual		
Durability	* Weight Bearing for whole surface	< 500 kg		
	* Point Weight Bearing(4x4cm)	< 180 kg		
	* Drop Test	Up to 100 cm		
	Water & Dust Resistance	IP67		
X-Ray Voltage Range		40~150kVp		
Voltage		AC 100~240V, 50/60Hz, DC18V 3.5A		
Environment		Storage: $-10^{\circ}$ C ~ $60^{\circ}$ C, $10\%$ ~ $90\%$ RH (non-condensing) Operation: $10^{\circ}$ C ~ $35^{\circ}$ C, $20\%$ ~ $75\%$ RH (non-condensing)		
Battery Type		Lithium-Ion Polymer Battery		
Battery Full Operation Time		**8 Hours	14 Hours	12 hours
Dimensions		330 x 315 x 15 mm	385 x 461 x 15 mm	461 x 461 x 15 mm
Weight (Without / With battery)		1.6 kg / 2.0 kg**	2.4 kg / 3.3 kg (dual battery)	3.0 kg / 3.9 kg (dual battery)

<sup>\*</sup> Weight Bearing and Drop test measured based on Non-Glass TFT
\*\* Prudent 1212 designed with single battery loading



## **PIXXGEN Corporation**

5F, Smart Bay, 123, Beolmal-ro, Dongan-gu, Anyang-si, Gyeonggi-do, Korea 14056 E-mail. sales@pixxgen.com Tel. +82 70 4846 8888 URL. www.pixxgen.com

Fax. +82 2 6455 2905