

Minimum Inspection Time Maximum Inspection Accuracy

**EXTREAM: Reliable Digital Detector Array Solutions
for Industrial & Security**

 KOREA

 Ministry of SMEs and Startups |  KBIZ Korea Federation of SMEs

 أديبيك
ADIPEC |  ادنوك
ADNOC Host

31 October - 3 November 2022
Abu Dhabi, United Arab Emirates

DRTECH
www.drtech.co.kr

Company Overview

“Always best quality, Trust inspection”

Company name	DRTECH Corporation	Headquarters and R&D Center	Production facility
Establishment	March 29th, 2000		
CEO	Seong Hyun, An		
Number Of Employee	300		
HQ, R&D Center	Seongnam, South Korea		
Factory	Seongnam, South Korea		
Data of Public Listing	December 5th, 2016 (KOSTAQ)		
			

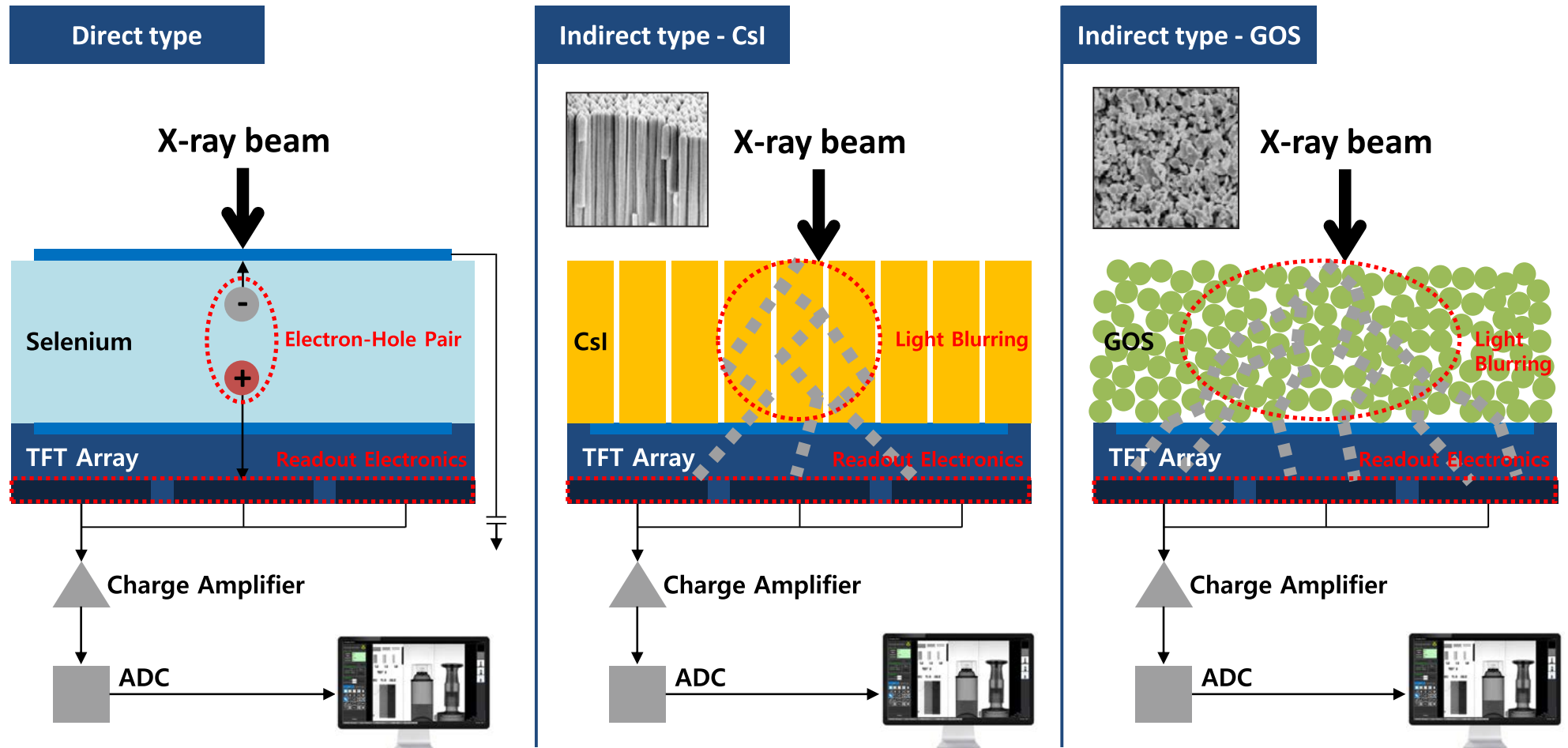
Our Technology

▷ Various DDA type

DRTECH is special supplier that can produce both Direct & Indirect type DDA in the world.

Especially among the indirect type, DRTECH can supply all Scintillators which makes difference of image character.

The customer can choose High sharpness Cesium iodide(CsI) /High signal detection Gadolinium oxysulfide(GOS) scintillator for each purpose.

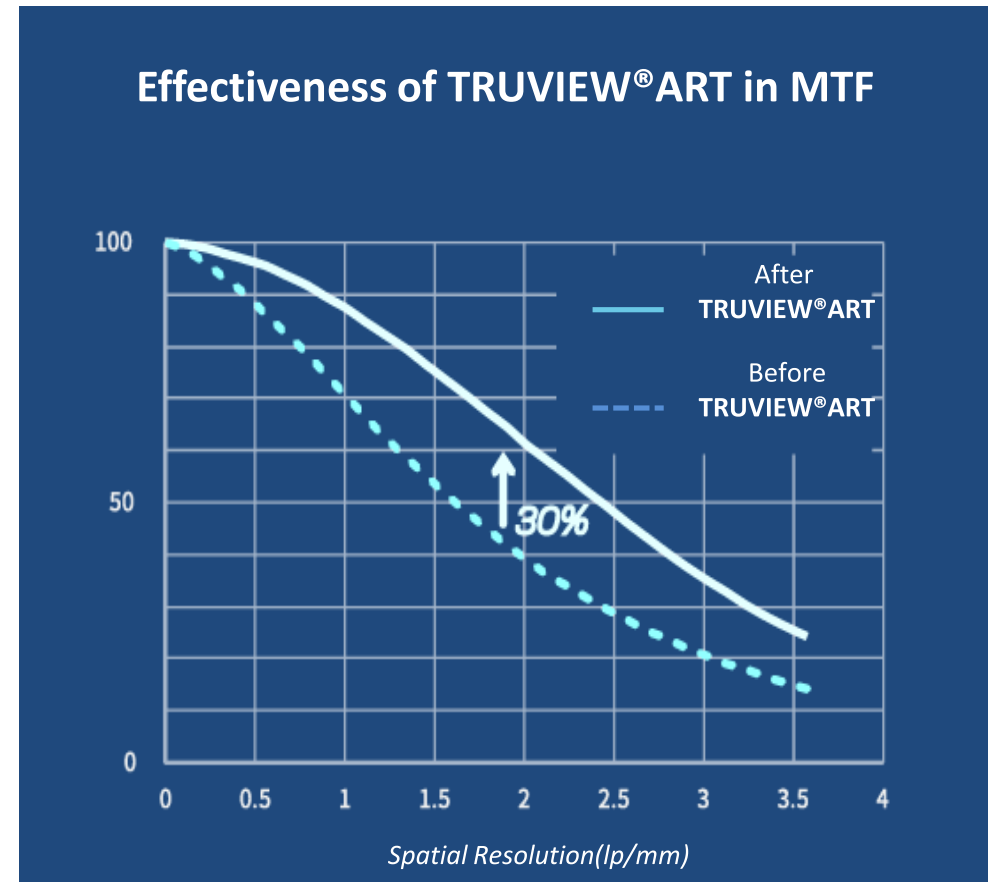
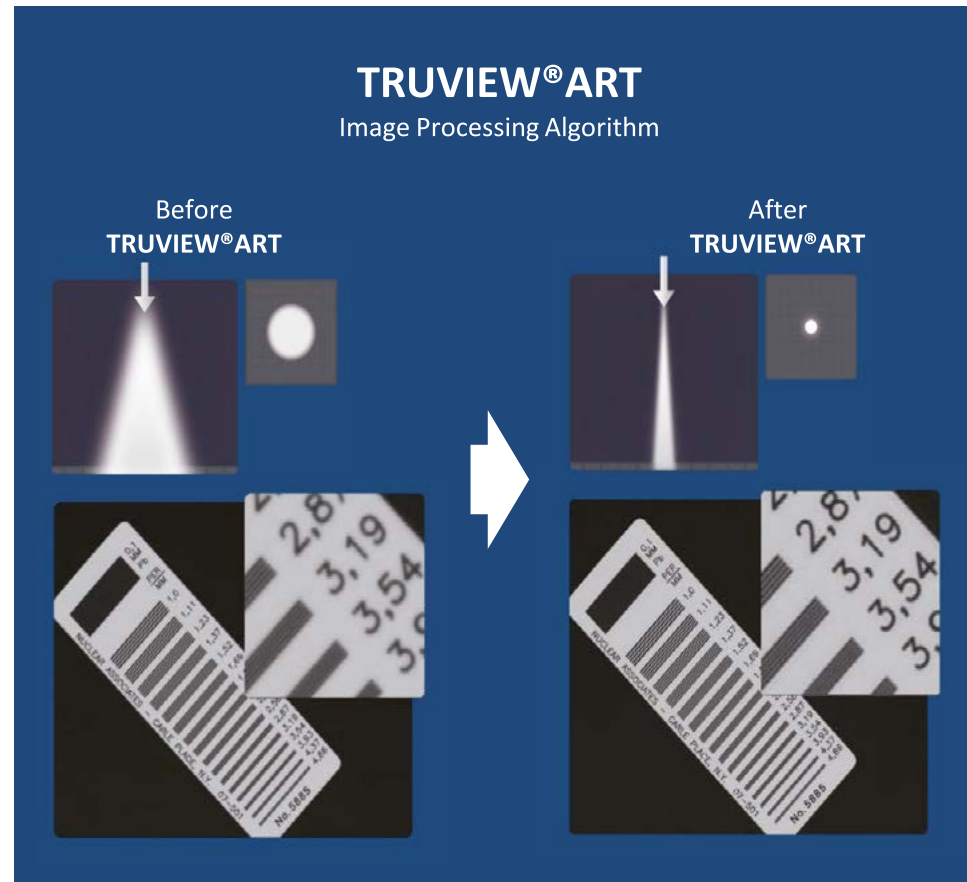


Our Technology

► Pre-image processing Technology: TRUVIEW®ART

MTF performance is related with the image quality in terms of the image sharpness.

DRTECH developed its own the image processing algorithm, TRUVIEW®ART which can increase MTF performance of indirect type DDA by removing the light scatter improving the image sharpness.



Our Technology

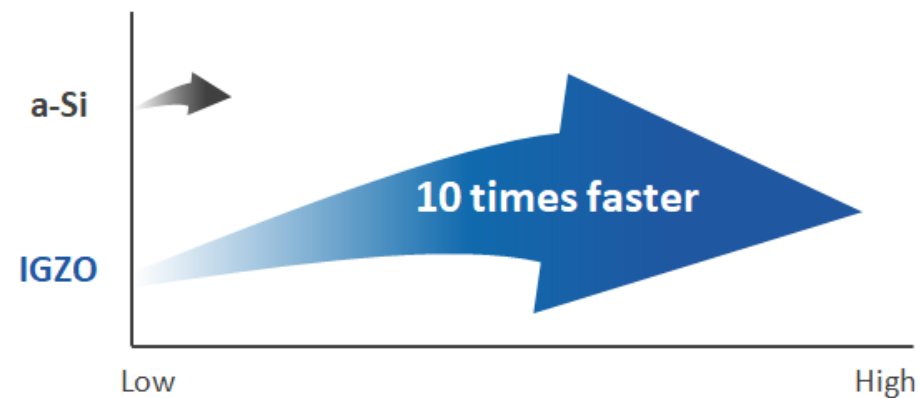
▶ Next generation IGZO TFT

DRTECH is applied the newest IGZO(Indium-Gallium-Zinc-Oxide) TFT to its DDA.

Compare to the ordinary A-Si(Amorphous Silicon) technology, IGZO has **10 times faster electron mobility** and **lower leakage current**. And it can provide **higher frame rate**, **better contrast** and **lower nose** to your X-ray system.

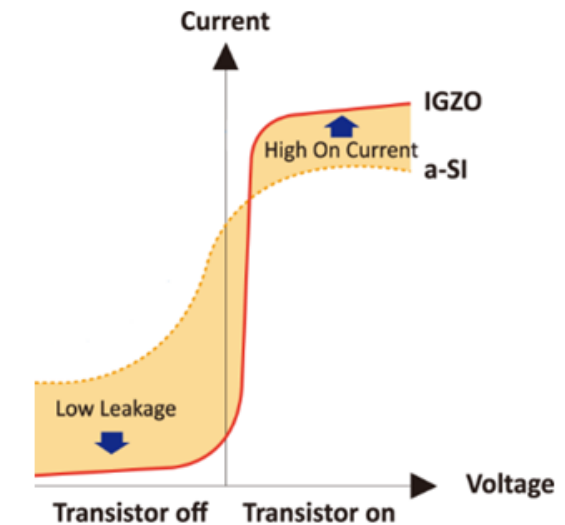
High Electron Mobility

Electric Current Speed (electron mobility) Comparison















- ✓ 10 times faster electron mobility
- ✓ Less requirement for the same conductivity
- ✓ Fast readout without image lag









Low Leakage Current



- ✓ Significantly lower leakage current
- ✓ High contrast image
- ✓ Superior noise reduction

Static series High mobility outdoor panel	Flex series World's 1 st Bendable & Curved panel	Real-time series High FPS X-ray system panel	NDPro Total image acquisition & management Software
 <p>EXT1024S/SH</p>  <p>EXT2143S</p>  <p>EXT2430G/H</p>  <p>EXT3643S</p>	 <p>EXT1036B/BW</p>  <p>EXT1036C</p>	 <p>EXT1616R</p>  <p>EXT2832R</p>  <p>EXT4343RC</p>  <p>EXT4343R</p>	 

Applications

-  Pipe Welding
-  Energy & Power
-  Aerospace
-  EOD / IED
-  Oil & Gas
-  Drone Testing
-  Museum Art
-  Shipyards



EXTREAM Static series

High mobility outdoor panel



EXT1024S/SH



EXT2143S



EXT2430G



EXT2430H



EXT3643S/SH

Active area (mm²)	233 x 97	430 x 216	291 x 233	291 x 233	430 x 358
Pixel pitch (µm)	76	140	76	76	140
IP Level	IP67	IP44	IP67	IP67	IP67



EXTREAM x Flex Series
WORLD FIRST
BENDABLE & CURVED DIGITAL X-RAY DETECTOR

FleX Curved
EXT1036C

FleX Bendable
EXT1036B/BW

► Why Flex series?

The 1st DDA for pipe & tank

FPD

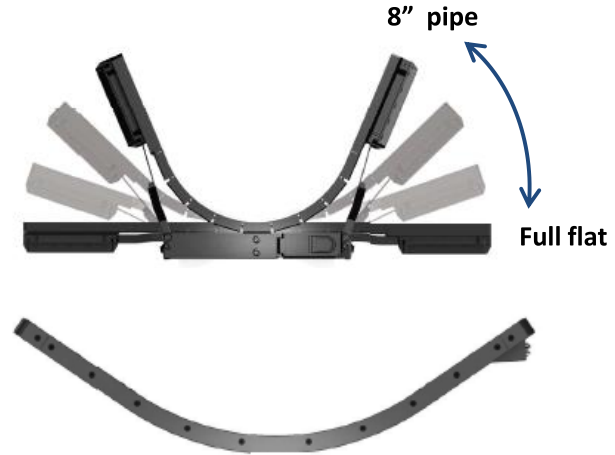


Flex series



- **World's 1st** DDA closely covered to the pipe & curved surface
- Minimized image distortion
- **Less X-ray shot**

Designed for the field



Order available from 8" to 42" pipe

- **Free bendable curve & Full order made fixed curve** to meet the field demand
- Wired / Wireless data connection
- **Light weight** for the carry out

High durability



- Water & Dust proof
- Non breakable Panel
- Drop test clear

▶ Flex series combination

EXT1036BW
Free Bendable Active Area

Wired / Wireless

Wireless mode



Wired mode



EXT1036B
Free Bendable Active Area

Wired / PWU Package (Wireless+Battery)

PWU Package
(Portable Wireless Unit)



Wired mode



EXT1036C
Fixed Curve Active Area

Wired / PWU Package (Wireless+Battery)

PWU Package
(Portable Wireless Unit)



Wired mode





EXTREAM Real-time series

High FPS X-ray system panel



EXT1616R



EXT2832R



EXT4343RC



EXT4343R

Active area (mm ²)	161 x 161	286 x 322	430 x 430	430 x 430
Pixel pitch (μm)	98	140	140	140
Frame rate (FPS)	40 @ 1x1 80 @ 2x2	30 @ 1x1 60 @ 2x2	15 @ 1x1 30 @ 2x2	15 @ 1x1 30 @ 2x2 45 @ 3x3 60 @ 4x4

NDPRO

Image Acquisition Software



NDPro™ provides various user-friendly functions enabling fast workflow. NDPro™'s intuitive user interface makes it easy for anyone to use.

- Check Detector Status & Configuration
- Gain Calibration & Image Scan
- Convenient Tool Bars
 - Zoom-in, Zoom-out, Ruler, Brightness Control, Line Profile Measurement, Statics Measurement, Ruler Calibration. Etc
- Easy Image Processing
 - Edge Enhance, Sharpening, Emboss, De-noise Etc.
- Export to Various Image Formats
 - DICOM, TIF, PNG, JPG, BMP

Optional,

- **NDPro Standard & Premium (including Image Processing)**

Thank You