
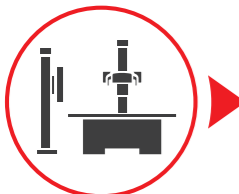








-  X-Ray Grid
-  Radiography System
-  Software
-  Computed Radiography
-  Processor
-  X-Ray Accessories
-  RF Treatment
-  Diagnostics




-  X-Ray System
-  for Medical
- &
-  for Veterinary

# CUBEX series

High frequency portable x-ray

- CUBEX 16
- CUBEX 24
- CUBEX 50

• We took the motive from Rubik's Cube when we decided on our product identity and name, **CUBEX**, which represents the wide range of creative solutions **CUBEX** brings as Rubik's Cube itself stands for wide range of creative solutions.

 <b>Compact Size</b>	<b>CUBEX 16</b> 335(L) X 153(H) X 170(W)	<b>light weight</b> Product Weight	<b>8.6kg</b> CUBEX 16	Simple design
	<b>CUBEX 24 &amp; 50</b> 360(L) X 200(H) X 190(W)		<b>13kg</b> CUBEX 24 <b>13kg</b> CUBEX 50	Soft touch controls with digital displays Calibrated cassette size indicator dials Inverted control panel for table use available Two stage dynamic, auto line compensation Easy integration with digital system Dual integrated laser pointer
• Packing Size 520 X 400 X 330mm				

## CUBEX series | High frequency portable x-ray

### Technical Specifications

		CUBEX 16	CUBEX 24	CUBEX 50
Input Power	Output Power	1.6kW	2.4kW	5kW
	Voltage	100V-120V / 220V-240V	100V-120V / 220V-240V	200V-240V
	Phase & Frequency	Single / 50 / 60 Hz	Single / 50 / 60 Hz	Single / 50 / 60 Hz
Radiography kV Range		40kV ~ 90kV	40kV ~ 100kV	50kV ~ 110kV
mAs Range		0.4mAs ~ 32mAs	0.4mAs ~ 100mAs	0.4mAs ~ 100mAs
mA Range		12 ~ 30mA	16 ~ 40mA	20 ~ 100mA
Max. kV Deviation		±5%	±5%	±5%
Max. mAs Deviation		±3%	±3%	±3%
Indication		kV(error code) / mAs: 7-segment LED	kV(error code) / mAs: 7-segment LED	kV(error code) / mAs: 7-segment LED
X-ray Tube	Focal Spot	1.2mm x 1.2mm	1.2mm x 1.2mm	1.8mm x 1.8mm
	Target Angle	19°	16°	15°
	Anode Heat Storage	10kHU	50kHU	42kHU
Collimator With Laser Pointer	Type	Double slit type, Manual operation	Double slit type, Manual operation	Double slit type, Manual operation
	Min. X-ray Field Size	5cm x 5cm @1m SID	5cm x 5cm @1m SID	5cm x 5cm @1m SID
	Max X-ray Field Size	40cm x 40cm @ 75cm SID	40cm x 40cm @ 75cm SID	40cm x 40cm @ 75cm SID
	Laser Pointer	Class : IIIA 5mW	Class : IIIA 5mW	Class : IIIA 5mW
	Lamp	24V LED	24V LED	24V LED
Dimension		335 x 153 x 170mm	360 x 200 x 190mm	360 x 200 x 190mm
Packing Size		520 x 400 x 330mm	520 x 400 x 330mm	520 x 400 x 330mm
Product Weight		8.6kg	13kg	13kg
G-Weight		18kg	22kg	22kg



# DynaVue

Solution for Veterinary Interventional Radiology Examination

## DR & Real-time FLO

### Advantage

- Target: Small & Medium interventional practice
- Larger FOV(17x17") compared to C-arm (max.12 inch)
- Image distortion free compared to C-arm (Image Intensifier)
- Space saving
- Minimally invasive diagnostic and therapeutic
- Real-time image processing (30 FPS for FLO)



## ExamVue Fluoroscopy

Real-Time Image Processing S/W

### From Image Stitching to DICOM 3.0

DynaVue includes ExamVue features such as DICOM Modality Worklist, DICOM Print, Reject, CD-DVD Burn, Image Stitching, Procedure Code Mapping function

### FPS mode (High Image Quality)

GPU based real-time image speed is 30 FPS when applied post-image processing engine

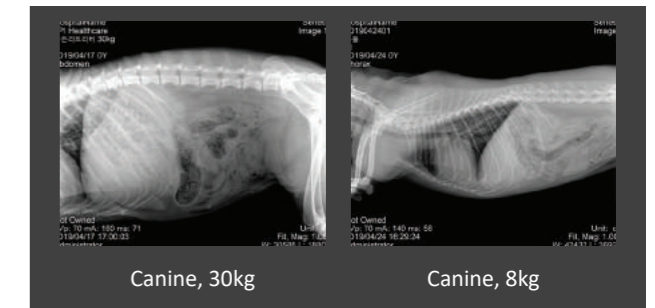
### Radiography + Fluoroscopy

Available to choose each mode

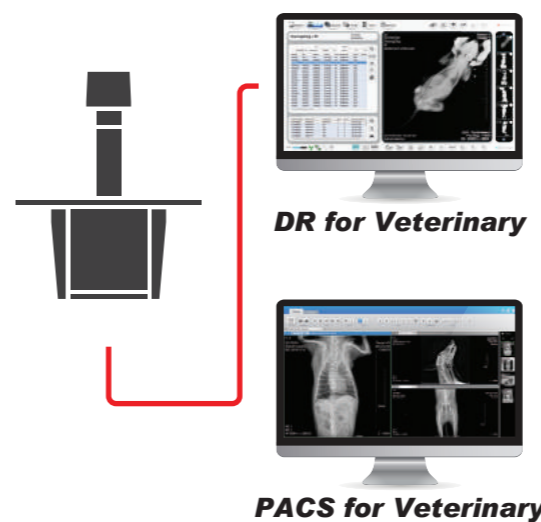
### FLO Sample Image



### RAD Sample Image



### ExamVue Software



Frame rate control **to acquire real-time images** up to 30 FPS

DICOM Cine-loop Display (with Previous, Pause, Play and Image slider bar)

Imaging and Annotation Tools  
(VHS, Norberg Angle, Zoom, Pan, Crop, Invert, Rotation, Angle, Label, Text)

Powerful User Features  
(Image import / export, Image comparison, Multi view, Image expansion, Full screen, Auto collimation, Reject/Accept, Image capture, Smart APR (Anatomic Programmed Radiography))  
*\* Only Available in Fluoroscopy Viewer*

Smart Window Level

DICOM3.0 Compatibility

Post Image processing mode for each body part

Changeable Skin color (Green Tea, Strawberry, Mint, Chocolate, Banana, Vanilla)

# Total Imaging Solution for VET

## Digital Radiography + Fluoroscopy

2 in 1 system

## As Low As Reasonably Achievable (ALARA)

Pulsed FLO manage reduced dose for you and your pet

\* 10ms/pulse

## 10kW Monoblock Type

15kW Inverter based system

## The World's First 43 x 43cm Large FOV

Detector allows dynamic performance

## Space Saving at Practice

Small footprint to fit your current clinic room



## Great Image Quality

### PSA (Photodiode Sensor Array)

Optimized Digital X-ray Image

### Wavelet Transform

Offering enhanced real-time FLO

## User Friendly Design

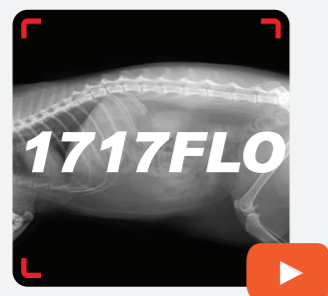
### 4 Way Floating Table

Enhance your workflow

### 23 inch Touch Screen Display

Intuitive UI

## Large Field of View Dynamic Exam



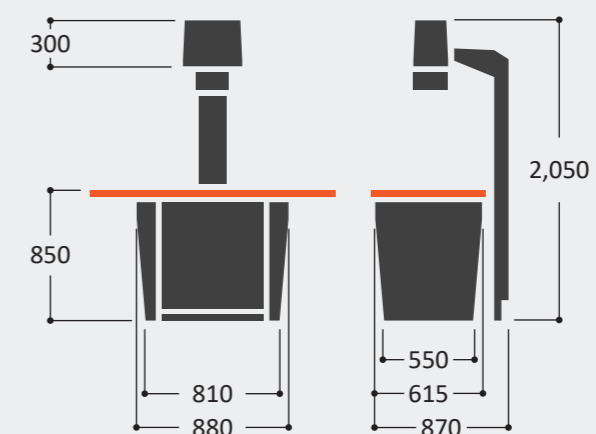
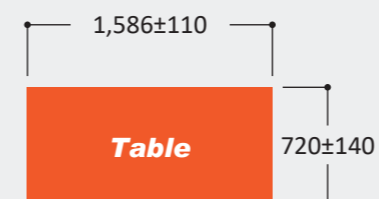
### Applications

- Minimally invasive Fracture repair
- Intraluminal Stenting for the Treatment of Tracheal Collapse
- Urethral and Colonic Obstructive Disease
- Vascular Procedures
- Orthopedic Procedures
- Contrast Studies of the Gastrointestinal Tract

## Specifications

<b>Monoblock</b>	<b>RAD mode</b>	<b>Power</b>	10kW (Inverter 15kW)
		<b>mA</b>	1mA ~ 160mA
		<b>Exposure</b>	200msec
	<b>FLO mode</b>	<b>Power</b>	3.5kW
		<b>mA</b>	1mA ~ 20mA
		<b>Exposure</b>	10min
		<b>Focal Spot</b>	0.6
		<b>kVP</b>	40 ~ 110kV(1kV step)
		<b>Target Angle</b>	16°
		<b>Heat Capacity</b>	150kJ
<b>Collimator</b>	<b>Type</b>		Double slit, Manual
	<b>Initial Position</b>		0cm * 0cm
	<b>Max Position</b>		43cm * 43cm
	<b>Laser pointer</b>		Class II
	<b>LED Lamp</b>		500mA, PWM control
<b>Detector</b>	<b>RAD mode</b>	<b>Pixel resolution</b>	3072 * 3072 (1*1 binning)
		<b>Pixel Pitch</b>	140µm
		<b>Spatial resolution</b>	3.57lp/mm
	<b>FLO mode</b>	<b>Pixel resolution</b>	1536 * 1536 (2*2 binning)
		<b>Pixel Pitch</b>	280µm
		<b>Spatial resolution</b>	1.78lp/mm
		<b>Framelsecond</b>	30 (High Image Quality) ; Post-Image Processing
		<b>Active Image size</b>	427 * 427mm
		<b>Bit depth</b>	16bit

### Dimensions (mm)



### Input Voltage

220Vac 60Hz / 110Vac 60Hz

### Size

720 (W) \* 1,586 (L) \* 2,050 (H)

### Weight

240kg

### Patient Weight

Max. 100kg

\* This Dimension on this catalogue is about measurement of the "DynaVue", and it may be adjusted possibly.



# The New Generation



Since 1980



X-ray Grids



Radiography System



Detector



Software



Computed Radiography



X-ray Accessories

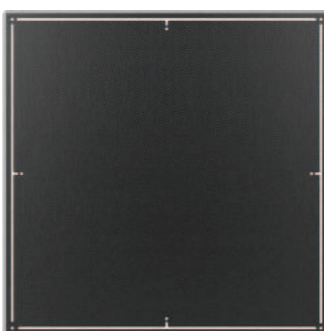


Gastroenterology

## Clear Vision REF series 1800Le

Clear Vision REF series X-ray flat panel detectors incorporate the proven technology of amorphous silicon. The amorphous silicon photodiode array and TFT underneath convert invisible X-ray photons into visible photons, and then into electric charges.

The electron signals are measured and amplified in the data line, and then converted to digital signals by the Analog/Digital converter. Finally, the digital signals are transmitted to a PC for processing to form an image. High DQE, high spatial resolution, extraordinary dynamic range and ultra-low noise are hallmarks of our Clear Vision REF series. Each Clear Vision REF detector is submitted for FDA and CE approval.



### Applications

- Medical and Veterinary
- Excellent for highly detailed extremity imaging

### Special Features

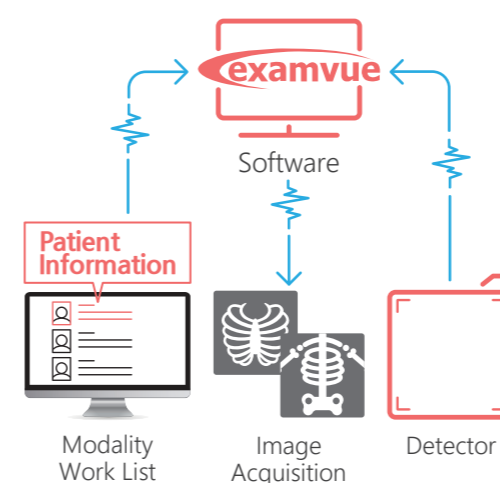
- Full-field AED for broad system compatibility
- Direct-Deposit CsI for better DQE and MTF
- Durable carbon fiber and aluminum alloy housing

## Clear Vision REF series - 1800Le

### Specifications

Sensor	
Scintillator	Direct Deposit CsI:TI
Active Area	430 x 430 mm
Pixel Array	3072 x 3072
Pixel pitch	140 μm
Image Quality	
Spatial Resolution	3.57 lp/mm
MTF	70% (@ 1 lp/mm), 40% (@ 2 lp/mm), 22% (@ 3 lp/mm)
DQE	60% (@ 0 lp/mm), 15% (@ 3 lp/mm), 9% (@ 3.5 lp/mm)
A/D Conversion	16 bits
Communication	
Communication Interface	Gigabit Ethernet, WiFi (2.4G/5GHz)
Image Acquisition Time	2-4 sec
Exposure Control	F²AED, Manual Sync, External Sync
Mechanical	
Dimension	460 x 460 x 15 mm
Weight	3.96 kg
Power	
Power Supply	100-250V AC
Frequency	50 / 60 Hz
Power Dissipation	22 W operating, <8 W in standby mode

### Digital Upgrade Solution



### ExamVue DR Software



- Integration of various flat panel detector by different manufactures
- Modality Work List Generator provided as bundle
- Multiple language support
- Fast and professional image processing for each individual examination
- Faster Image Acquisition using the preview function



# The New Generation



**40<sup>TH</sup>**  
Since 1980

X-ray Grids

Radiography System

Detector

examvue Software

Computed Radiography

X-ray Accessories

Gastroenterology



## Clear Vision REF series 1500CWe & 1800CWe

Clear Vision REF series X-ray flat panel detectors incorporate the proven technology of amorphous silicon. The amorphous silicon photodiode array and TFT underneath convert invisible X-ray photons into visible photons, and then into electric charges.

The electron signals are measured and amplified in the data line, and then converted to digital signals by the Analog/Digital converter. Finally, the digital signals are transmitted to a PC for processing to form an image. High DQE, high spatial resolution, extraordinary dynamic range and ultra-low noise are hallmarks of our Clear Vision REF series. Each Clear Vision REF detector is submitted for FDA and CE approval.

**Pixel Pitch**

**Efficiency**

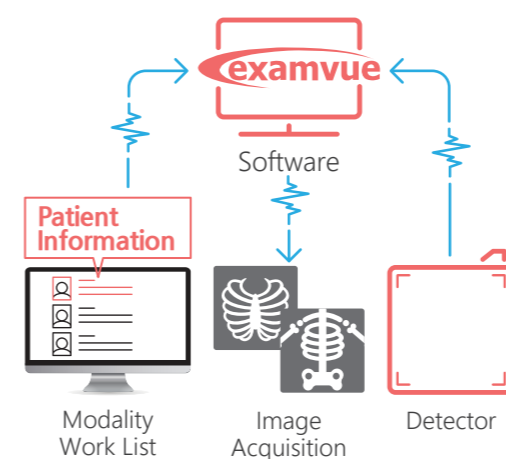
**Spatial Resolution**

### Clear Vision REF series - 1500CWe & 1800CWe

Specifications	1500CWe	◀ • ▶	1800CWe
<b>Sensor</b>			
Scintillator	Direct Deposit CsI		
Active Area	430 x 356 mm	◀ • ▶	430 x 430 mm
Pixel Array	3072 x 2560 pixels	◀ • ▶	3072 x 3072 pixels
Pixel pitch	140 μm		
<b>Image Quality</b>			
Limiting Resolution	3.57 lp/mm		
MTF	63% (@ 1.0 lp/mm), 35% (@ 2.0 lp/mm), 17% (@ 3.0 lp/mm) (@ RQA5, 27μGy)		
DQE	62% (@ 0.0 lp/mm), 50% (@ 0.5 lp/mm), 45% (@ 1.0 lp/mm)		
A/D Conversion	16 bits		
<b>Communication</b>			
Communication Interface	Gigabit Ethernet, WiFi (2.4G/5GHz)		
Image Acquisition Time	2-4 sec		
Exposure control	F²AED, Manual Sync, Software Sync		
AP	Optinal		
<b>Mechanical</b>			
Dimension	460 x 384 x 15 mm	◀ • ▶	460 x 460 x 15 mm
Weight	3.7 kg	◀ • ▶	4.6 kg
<b>Power</b>			
Maximum Power	Max. 36VA	◀ • ▶	Max. 48VA
Power Supply	100-240V AC		
Frequency	50 / 60 Hz		
Battery Performance	Up to 1,400 shots and 5 hours in ready mode		

### Digital Upgrade Solution

#### ExamVue DR Software



Integration of various flat panel detector by different manufactures

Modality Work List Generator provided as bundle

Multiple language support

Fast and professional image processing for each individual examination

Faster Image Acquisition using the preview function



# NeoQ 4343

## IGZO (Indium Gallium Zinc Oxide) Flat Panel Detector

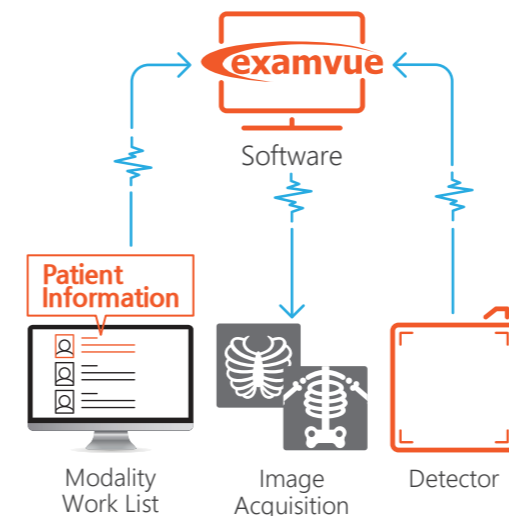
NeoQ FPD's technology is well above a-Si detector. We are one of the first company to mount IGZO technology on a 17 x 17 (43cm x 43cm) FPD. This new technology offers high DQE performance with low NED. NeoQ not only provides a good image quality with lower dose compared to other detectors, it also provides faster image acquisition speed which improves work flow efficiency.

## Specifications

Scintillator	Direct Deposit CsI:TI
Detector Technology	IGZO TFT
Dimension	460 x 460 x 15 mm Cassette size
Weight	3.5 kg
Active Area	426.44 x 426.44 mm
Pixel Array	3,072 x 3,072
Pixel pitch	140 μm
A/D Conversion	16 bit
DQE	≥ 72% @ 1 lp/mm ≥ 47% @ 3 lp/mm
MTF	1 lp/mm : ≥ 69% 2 lp/mm : ≥ 38% 3 lp/mm : ≥ 21%
Lag	< 0.025% 1st frame (additive lag)

## Digital Upgrade Solution

### ExamVue DR Software



Integration of various flat panel detector by different manufactures

Modality Work List Generator provided as bundle

Multiple language support

Fast and professional image processing for each individual examination

Faster Image Acquisition using the preview function

Useful Imaging and Annotation Tools  
 • Free Rotation, Image Export, grid lines Suppression, DICOM3.0 Compatible, DICOM Print, DICOM Send

Optimized GUI design for touch screen



ExamVue DR Software for Medical



# ExamVue DR

40<sup>TH</sup> Since 1980

X-ray Grids

Radiography System

Detector

examvue Software

Computed Radiography

X-ray Accessories

Gastroenterology



Integration of various flat panel detector by different manufacturers

**Patient Information**  
Modality Work List Generator provided as bundle

**Useful Imaging and Annotation Tools**  
Image Stitching, Free Rotation, Black Blocker, Image Export, Automatic or manual removal of grid lines  
DICOM3.0 Compatible, DICOM Print, DICOM Send

**User Friendly Design**  
Optimized GUI design for touch screen

Multiple language support

Fast and professional image processing for each individual examination

**Convenient Diagnosis Function**  
Freely Configurable body parts  
Fast and safe registration of emergency patients

**Simple & Fast Workflow**  
Faster Image Acquisition using the preview function

## ExamVue DR Software - for Medical



### Proposed Imaging Solution for Chest

#### Multiple Language Support



▶ Easy process of adding unsupported languages.

#### Image Optimization Features

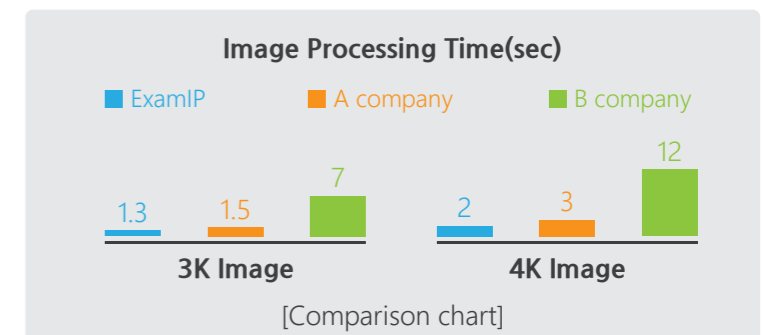
Enhanced various Image processing technology & Parameter adjustment Easily modifiable features such as Sharpness, Edge, Contrast, Latitude, Gamma, Noise reduction Customizable image processing parameter per user's preference capability.



Hard    Medium    Soft

#### Fast Image Processing Time

- Avg. image processing time of 1.3 second required for 9MPx
- Avg. image processing time of 2 seconds required for 16MPx



(Note: Workstation used for testing's specification. CPU: Intel Core i5-3470 (3.20GHz), RAM 8.00GB)

ExamVue DR Software for Veterinary



# ExamVue DR

**40<sup>TH</sup>**  
Since 1980

X-ray Grids

Radiography System

Detector

examvue Software

Computed Radiography

X-ray Accessories

Gastroenterology

Integration of various flat panel detector by different manufacturers

**Animal Information**  
Modality Work List Generator provided as bundle

**Useful Imaging and Annotation Tools**  
• Free Rotation, Black Blocker, Image Export, Automatic or manual removal of grid lines  
• DICOM3.0 Compatible, DICOM Print, DICOM Send

**User Friendly Design**  
• Optimized GUI design for touch screen

Multiple language support

Fast and professional image processing for each individual examination

**Convenient Diagnosis Function**  
• Freely Configurable body parts  
• Fast and safe registration of emergency patients

**Simple & Fast Workflow**  
• Faster Image Acquisition using the preview function



## Proposed Imaging Solution for VET

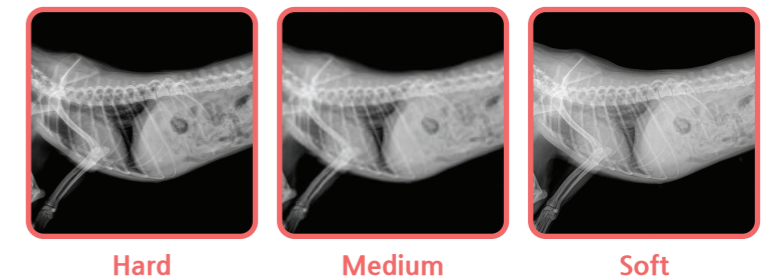
### Multiple Language Support



▶ Easy process of adding unsupported languages.

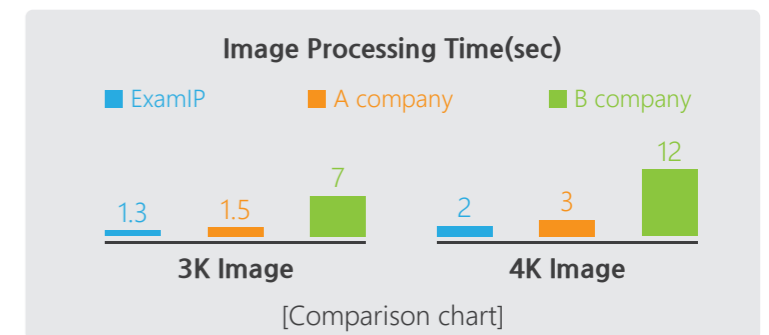
### Image Optimization Features

Enhanced various Image processing technology & Parameter adjustment Easily modifiable features such as Sharpness, Edge, Contrast, Latitude, Gamma, Noise reduction Customizable image processing parameter per user's preference capability.



### Fast Image Processing Time

- Avg. image processing time of 1.3 second required for 9MPx
- Avg. image processing time of 2 seconds required for 16MPx



(Note: Workstation used for testing's specification: 20GHz, RAM 8.00GB)