

Samsung Medison is a global leading medical devices company. Founded in 1985, the company now sells cutting-edge medical devices including diagnostic ultrasound, digital X-ray and blood analyzer, in 110 countries around the world. The company has attracted global attention in the medical field with its R&D capabilities and advanced technologies. In 2011, Samsung Medison became an affiliate company of Samsung Electronics, integrating world's best IT, image processing, semiconductor and communication technologies into medical devices.

CT-WS80A with Elite-FTW-140905-EN

Elite is a package of leading technologies for upgraded systems. WS80A with Elite features powerful imaging performance with advanced transducer (S-Vue) and extended 5D capabilities (5D Heart, 5D CNS, and 5D Follicle).

S-Vue stands for Samsung smart transducer technology which supports broader bandwidth and higher sensitivity.



Scan code or visit  
[www.samsungmedison.com/ultrasound/ob-gyn/ws80a](http://www.samsungmedison.com/ultrasound/ob-gyn/ws80a)  
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# SAMSUNG ULTRASOUND WS80A with Elite

## THE PREMIUM DIMENSION



**SAMSUNG**

# PREMIUM WOMEN'S HEALTH ULTRASOUND FOR ELITE DIAGNOSIS

Making a precise diagnosis on patients is absolutely critical for physicians, and WS80A with Elite is designed to satisfy those needs, even for the complex women's health exams. With stepped-up 3D imaging engine, physicians get clearer and more detailed images that are both life-like and void of artifact. Furthermore, advanced S-Vue transducer technology provides enhanced vision of the scanned areas, ensuring confidence in your clinical decisions.



## CRYSTAL CLEAR IMAGE FOR DIAGNOSTIC ACCURACY

### Hybrid Imaging Engine evo

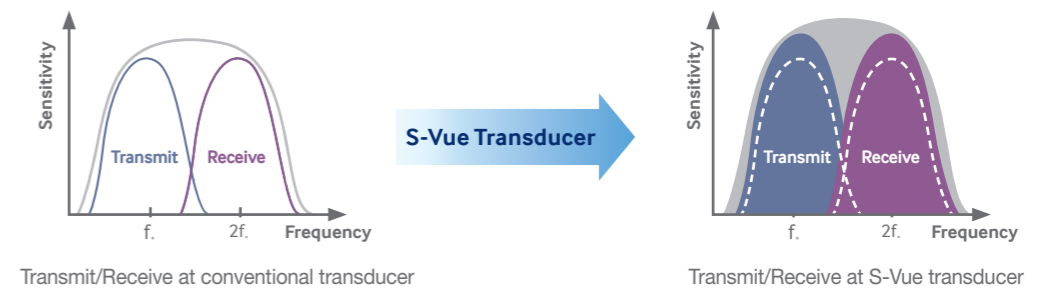
Hybrid imaging engine evo combines optimal 2D, 3D and color image quality with a fast frame rate to provide more powerful data processing and noise reduction capabilities. This advanced technology provides clearer 2D and more detailed 3D images helping to improve diagnostic accuracy.



### S-Vue Transducer

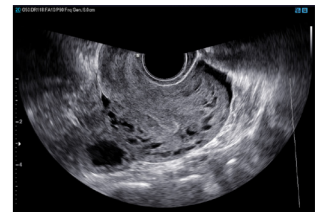


The extremely responsive S-Vue transducer (CV1-8A, CA1-7A) provides broader bandwidth and higher sensitivity. This allows to deliver high image resolution even with technically challenging patients. In addition, the ergonomically designed and lightweight transducer enables users to experience less fatigue. Especially, CV1-8A is approximately 30% lighter than the conventional model.



### Wide Angle Vaginal Transducer

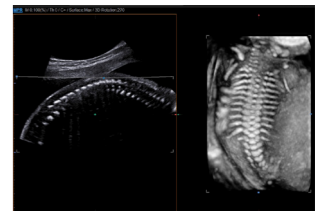
The new wide angle vaginal transducer offers field-of-view up to 210° for the diagnosis of a wide range of diseases in gynecology examinations. It is especially useful for viewing the left-right symmetric model of fallopian tubes and ovaries.



Uterus and ovary

### ClearVision™

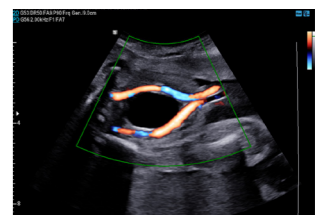
ClearVision™ offers speckle reduction, edge enhancement and contrast enhancement for clear and natural images. In addition, ClearVision™ improves on previous technology with application-specific optimization and advanced temporal resolution in live scan mode.



Fetal spine with ClearVision™

### S-Flow™

S-Flow™, a sophisticated color Doppler technology with greater sensitivity, can help to detect even the peripheral blood vessels. It enables accurate diagnosis when blood flow examination is especially difficult.



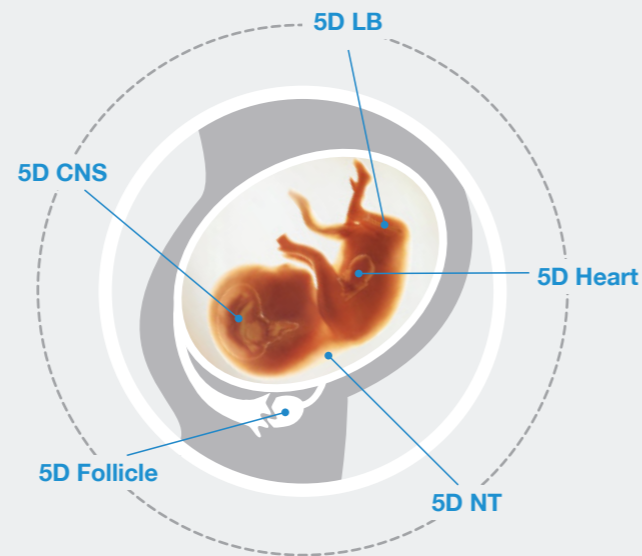
Umbilical artery with S-Flow™



# 5D ADVANCED DIAGNOSTIC SOLUTIONS

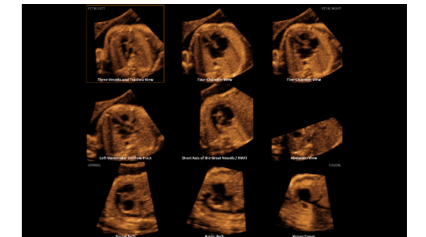
## EXPERIENCE PREMIUM CARE IN WOMEN'S HEALTH

WS80A with Elite's 5D total solutions bring exceptional productivity in exam workflow. Also, it provides useful information to evaluate various fetal conditions or women's health issues.



### 5D Heart (Fetal Heart Examination)

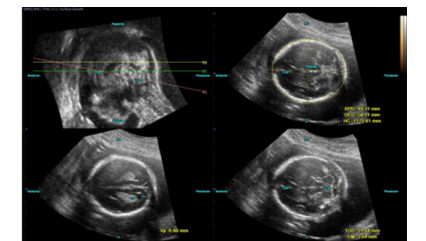
5D Heart allows interrogation of a STIC (spatiotemporal image correlation) volume dataset using "intelligent navigation" technology, which automatically generates nine standard fetal echocardiography views simultaneously in a single template.



Fetal heart examination with 5D Heart

### 5D CNS (Fetal Brain Measurement)

5D CNS offers 6 measurements (BPD, HC, OFD, Vp, TCD, CM) from 3 transverse planes of a fetal brain which are the key indicators for intuitive fetal brain visualization. It improves throughput with only a 2 click operation.



Fetal brain measurement with 5D CNS

### 5D LB (Fetal Long Bone Detection)

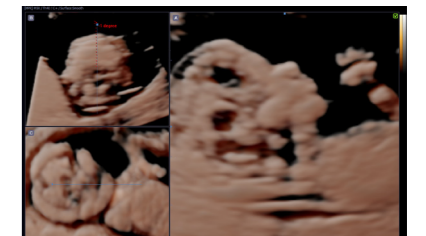
5D LB allows easy detection and measurement of fetal long bones from volume data, with intuitive visualization of the fetal structures. Evaluation of fetal condition becomes more efficient as 5D LB improves measurement accuracy while reducing exam time.



Fetal long bone measurement with 5D LB

### 5D NT (Nuchal Translucency Measurement)

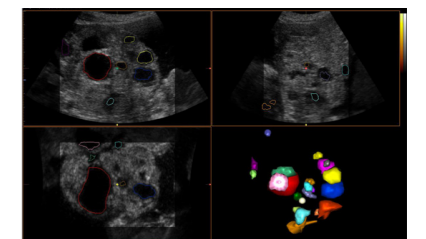
Operator dependency is reduced for the first trimester fetal nuchal translucency measurements with NT measurement solutions. 5D NT applies Realistic Vue™ to automatically detected mid-sagittal view for intuitive confirmation.



NT measurement with 5D NT

### 5D Follicle (Follicle Measurement)

Sonographic parameters have been proven to be effective indicators when assessing in-vitro fertilization (IVF). WS80A with Elite's 5D Follicle finds follicles automatically and measures the size and the status of each follicle to provide useful information.



Follicle measurement with 5D follicle

\* Above features may not be available in some countries.



## INTELLIGENT MOBILE COMMUNICATION

Physicians often face the challenge of performing exams and also efficiently communicating with patients. With leading-edge imaging and revolutionary technologies, such as Realistic Vue™ and Hello Mom, WS80A with Elite transforms obstetric exams enabling improved workflow and easier communication.

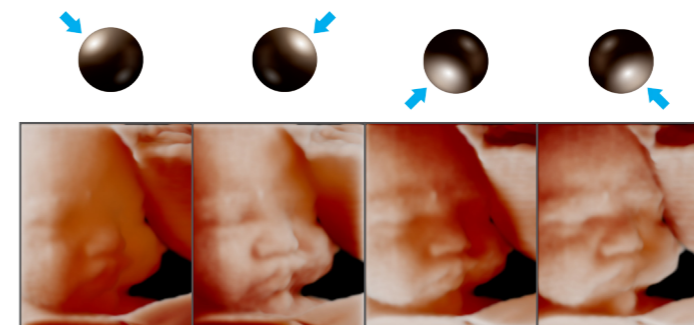
## REALISTIC IMAGE RENDERING AND SAMSUNG'S ENHANCED SHARING TECHNOLOGY

### Realistic Vue™

Realistic Vue™ displays high resolution 3D anatomy with exceptional detail and realistic depth perception. User selectable light source direction creates intricately graduated shadows for better defined anatomical structures.



2nd trimester fetal face with Realistic Vue™



Realistic Vue™ with different directions of the light

### Hello Mom

Hello Mom is an Android smartphone application for pregnant mothers that can be wirelessly connected to WS80A with Elite to download fetal ultrasound images and movies. Mothers can then easily share the ultrasound images or movies with others, and they can also keep track of their babies' growth using Hello Mom.

\* Hello Mom is not an application for diagnosis.



### 5D Cine

WS80A with Elite provides 3D stereo images through Samsung 3D Smart TV. Mothers can enjoy these realistic images at home.

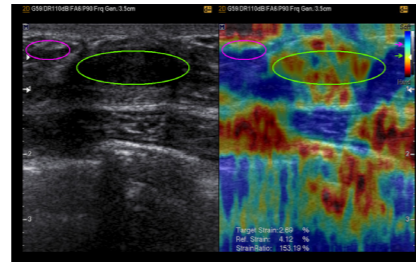
\* Above features may not be available in some countries.



# EFFICIENCY IN DIAGNOSIS

## E-Breast™ (ElastoScan™ for Breast)

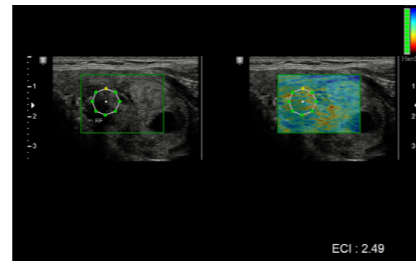
E-Breast technology calculates the strain ratio between the selected target and surrounding tissues. Unlike conventional ultrasound elastography, E-Breast™ requires only one ROI to be selected by the user. This simplified process of selecting one ROI enhances consistency and reduces the chance of error by not manually selecting the surrounding tissue region.



Breast elastography with strain index

## E-Thyroid™ (ElastoScan™ for Thyroid)

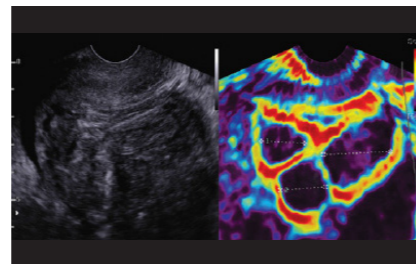
E-Thyroid™ technology provides more objective assessment of thyroid lesions by incorporating a useful index for suspicious area. E-Thyroid™ images are generated using pulsations from the adjacent carotid artery. It thereby eliminates the need for manual transducer compression for greater consistency.



Thyroid elastography with ECI

## ElastoScan for Gynecology

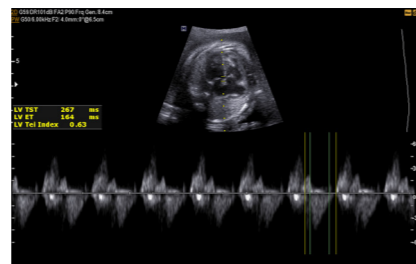
ElastoScan™ helps to diagnose benign gynecological disorders and to differentiate fibroids and adenomyosis. Therefore, ElastoScan™ is a promising new technique in the field of gynecology.



Elastography of uterine with ElastoScan™

## MPI

MPI enables semi-automatic measurement of the fetal myocardial performance index (MPI) to reduce operator dependency in MPI measurements. MPI also improves workflow during fetal heart exams with its simple, one-click operation.



Fetal myocardial performance index measured with MPI

\* Above features may not be available in some countries.

# FOR HIGHER PATIENT THROUGHPUT

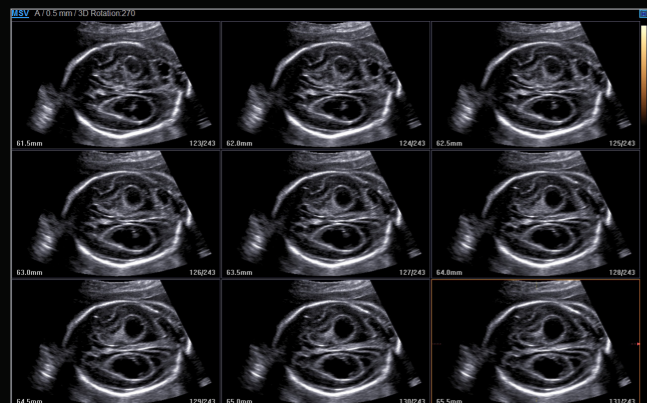
In order to meet the demands of the increasingly busy clinical environments, hospitals have to continuously enhance their productivity. Capabilities of WS80A with Elite include automated functions that improve the diagnostic workflow. Thus, exams can be performed faster, leading to higher patient throughput and increased productivity of the department.





# IDEAL IMAGE QUALITY FOR TARGET EXAMS

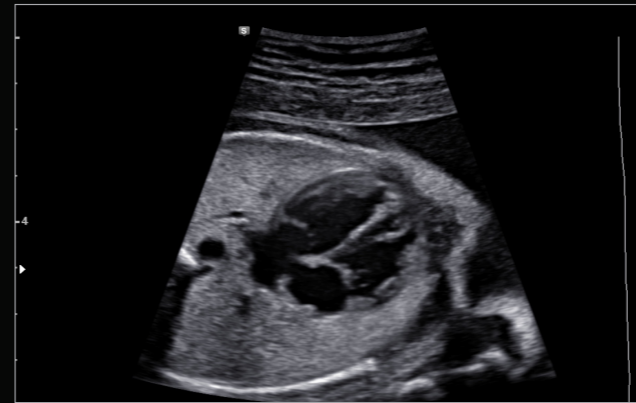
WS80A with Elite is ideal for physicians who often perform target ultrasound exams for women's health. The premium-class 2D, 3D/4D, and color image quality of WS80A with Elite helps to increase diagnostic confidence.



Hydrocephalus with Multi-Slice View™



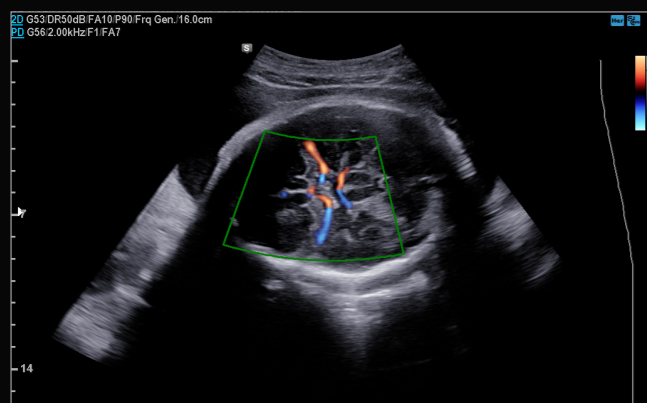
Fetal face with Realistic Vue™



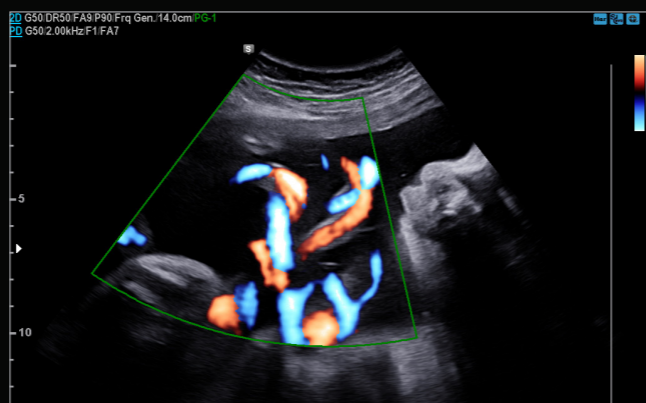
Fetal heart in 4 chamber view with ClearVision™



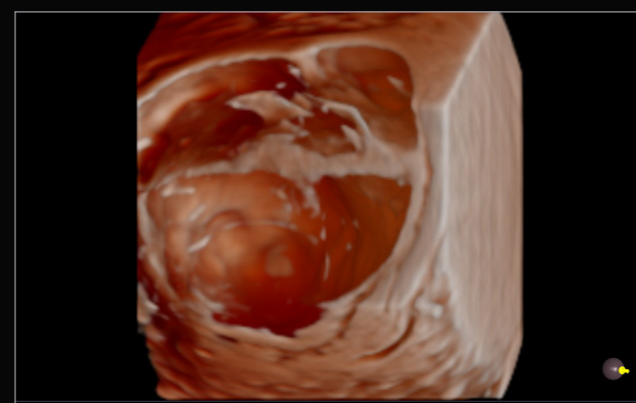
Fetus at 10 weeks



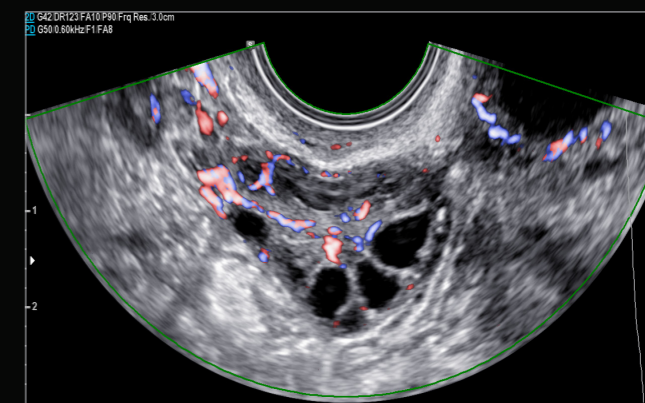
Middle cerebral artery with S-Flow™



Umbilical cord with S-Flow™



Ovarian cyst with Realistic Vue™



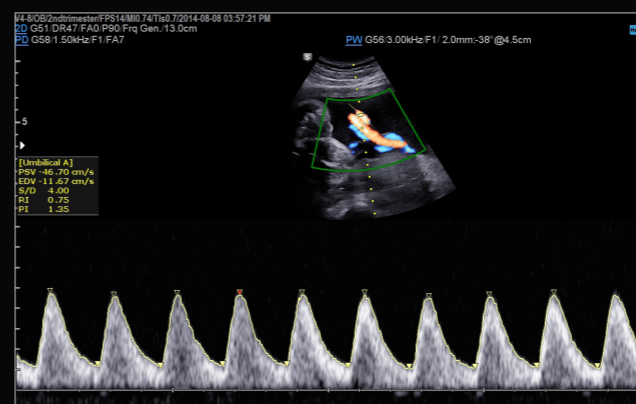
Ovarian cysts with S-Flow™



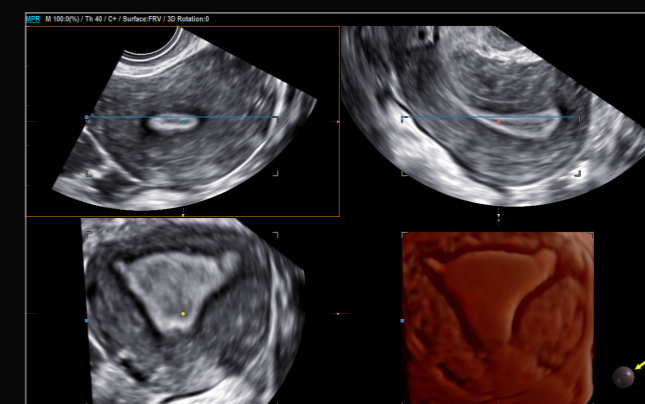
Fetal abdomen with ClearVision™



Mild pyelectasis with ClearVision™



Umbilical artery with PW



Uterus with Realistic Vue™



# STRESS-FREE PERFORMANCE

Clinical environments are intense, and therefore physicians always try their best to minimize stress. With design aspects that enable physicians to focus more on imaging through features such as touch screen and digital TGC, WS80A with Elite reduces stress and labor when operating the system. It provides a more beneficial environment, allowing the users more time to concentrate on an efficient and effective diagnosis.

## 1 Transducer Cable Hangers

Users can arrange the transducer cables neatly on the two hangers on either side of the system.



## 2 Gel Warmer

Two-level adjustable gel warmer maintains ultrasound gel at a comfortable temperature from 30°C to 39°C.



## 3 Additional EV Transducer Holder

An additional endo-vaginal (EV) transducer holder on the system prevents stressful situations where users accidentally knock over endo-vaginal transducer which does not perfectly fit in standard transducer holders.



## 4 23-inch LED Monitor

The 23-inch screen LED monitor offers you higher quality color image representation as well as higher resolution compared to conventional monitors, delivering enhanced vision of the ultrasound images.



## 5 10.1-inch Touch Screen

The 10.1-inch touch screen is highly sensitive, allowing for easy input to minimize users' stress from repetitively pressing buttons.



## 6 Adjustable Control Panel

Smooth up and down lift allows you to adjust the system to the your preferred height without straining.





# SUPERIOR TRANSDUCERS FOR SUPERIOR IMAGING

The transducer line-up for WS80A with Elite includes superior S-Vue transducer and a wide-angle vaginal transducer that are optimized for women's health imaging.

## Curved Array Transducers



**CA1-7A**

- Application : Abdomen, Obstetrics, Gynecology
- Field of View : 70°



**CA2-8A**

- Application : Abdomen, Obstetrics, Gynecology
- Field of View : 58°



**CF4-9**

- Application : Pediatric, Vascular
- Field of View : 92°

## Volume Transducers



**CV1-8A**

- Application : Abdomen, Obstetrics, Gynecology
- Field of View : 70°



**LV3-14A**

- Application : Musculoskeletal, Small Parts, Vascular
- Field of View : 38.4mm



**V4-8**

- Application : Abdomen, Obstetrics, Gynecology
- Field of View : 76°



**C2-6**

- Application : Abdomen, Obstetrics, Gynecology
- Field of View : 58.12°



**SC1-6**

- Application : Abdomen, Obstetrics, Gynecology
- Field of View : 60.61°



**V5-9**

- Application : Obstetrics, Gynecology, Urology
- Field of View : 150°

## Linear Array Transducers



**LA3-16A**

- Application : Small Parts, Vascular, Musculoskeletal
- Field of View : 40mm



**L5-13**

- Application : Small Parts, Vascular, Musculoskeletal
- Field of View : 40mm



**L3-12A**

- Application : Small Parts, Vascular, Musculoskeletal
- Field of View : 50mm

## Endo-Cavity Transducers



**VR5-9**

- Application : Obstetrics, Gynecology, Urology
- Field of View : 150°



**E3-12A**

- Application : Obstetrics, Gynecology, Urology
- Field of View : 210°

## Phased Array Transducer



**PE2-4**

- Application : Abdomen, Cardiac, TCD
- Field of View : 90°