



SAMSUNG

GC85A

The **GC85A** digital radiography system enables fully automated operation with the THU, motorized wall stand and patient table all working in tandem. The Samsung detector provides fast connection and promotes synergy between other Samsung systems. This feature laden system provides increased productivity and throughput while delivering the diagnostic confidence required in today's radiography environment.

Accelerating Intelligence

Premium ceiling digital radiography system iQuia™ GC85A provides advanced low dose imaging experience and streamlining workflow saves more time to focus on improved patient care



Diagnostic Confidence

Low Dose in New S-Vue™

S-Vue™ not only provides better image quality, but also secures better patient safety in radiography examinations.

This can help change the patient's perspectives for X-ray radiation and improve patient satisfaction.

The dose level can be reduced up to 45% dose reduction for pediatric abdomen, 15.5% for pediatric chest, and 27% for pediatric skull exams with the new S-Vue™ engine.*

Case1. Pediatric Chest PA

Conventional



54kVp / 1.42mAs / 0.06dGy*^{air} / 0.1mmCu Filter

16.1 μ Gy

Low Dose

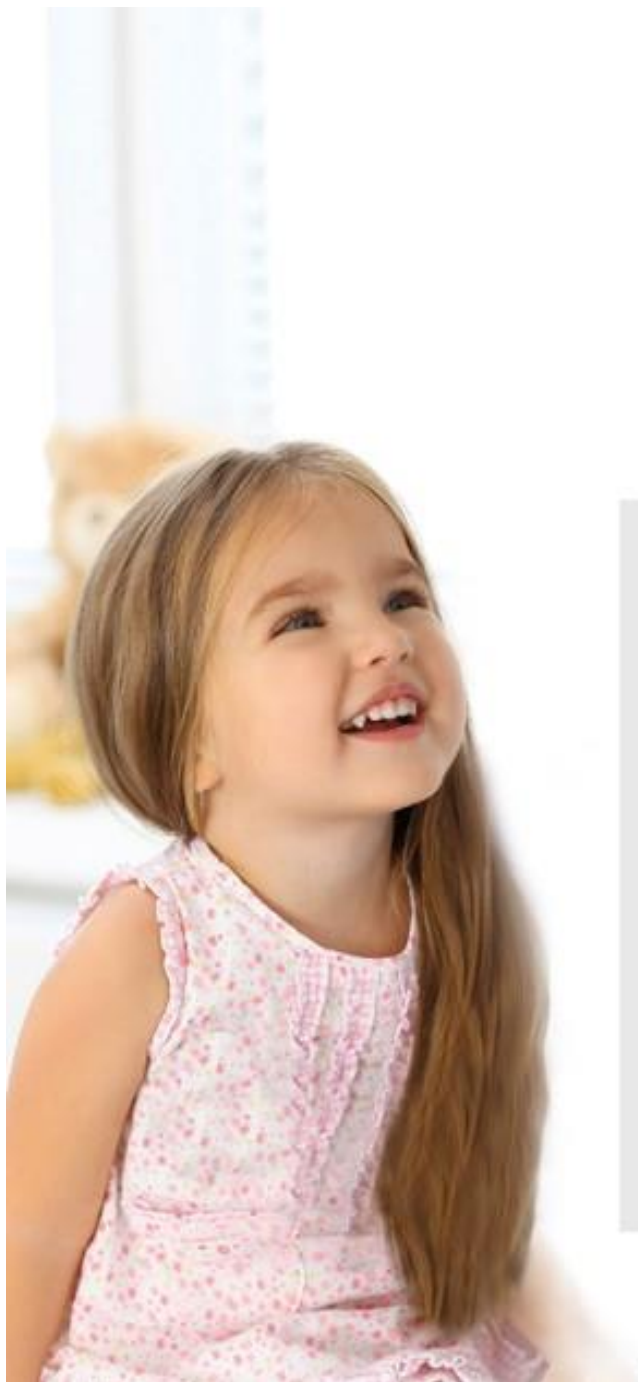


54kVp / 1.21mAs / 0.05dGy*^{air} / 0.1mmCu Filter

13.7 μ Gy



* Note: The claim concerning Samsung DR is based on limited phantom and clinical study results. Only routine PA chest radiography and abdominal radiography for average adults and pediatric abdominal, chest, skull radiography were studied, excluding pediatric patients under 1 month old. (FDA cleared - K172229, K182183) In practice, the values of dose reduction may vary accordingly. These clinical images calculate the dose reduction rate from its own standard dose at the clinical site, unlike our FDA claim which compares dose between new IPE and old IPE. The clinical site is responsible for determining whether the particular radiographic imaging needs are not impacted by such x-ray dose reduction.
** Case 1 image was taken with GMB5. | Case 2,3 images were taken with GC85A.



iQuia™ Detector

iQuia™ Detector is a new introduction to the Samsung DR prestige line-up to accelerate connection and promote synergy between the systems. Enhanced load allowance* along with dust and water resistance allows the detector to be actively implemented in versatile environments. Its robust design will improve your workflow and alleviate daily burdens.

* Allowed load (Point load, 4cm radius on the center) : 200 kg



IP54 (IEC 60529)



Water resistance



Dust resistance

SIDE CHAMFER to ease your lifting



CENTER ENGRAVING to help position the patient



REAR GRIP to support transportation



Real-time Shock Sensing

Continuous status tracking of the detector will help upgrade user confidence and guarantee uptime.

Real-time shock sensing will allow the detector to be in shape for use at anytime, anywhere.

The image shows a tablet displaying a 'Detector Shock Log' application. The interface includes a search bar, a table with columns for Date/Time, Detector Model, Detector Serial Number, Shock Level, Operator, S Status Name, and S Status Serial No., and a 'Print Location' button at the bottom.

Date/Time	Detector Model	Detector Serial Number	Shock Level	Operator	S Status Name	S Status Serial No.
2019-01-01 10:10	2019-01	XXXXXXXXXX10	Low	Operator	Good	2019-01-01-10
2019-01-01 10:15	2019-01	XXXXXXXXXX10	Low	Operator	Good	2019-01-01-15
2019-01-01 10:20	2019-01	XXXXXXXXXX10	Medium	Operator	Good	2019-01-01-20
2019-01-01 10:25	2019-01	XXXXXXXXXX10	Low	Operator	Good	2019-01-01-25
2019-01-01 10:30	2019-01	XXXXXXXXXX10	Low	Operator	Good	2019-01-01-30
2019-01-01 10:35	2019-01	XXXXXXXXXX10	Low	Operator	Good	2019-01-01-35
2019-01-01 10:40	2019-01	XXXXXXXXXX10	Low	Operator	Not Shock	2019-01-01-40



Chest AP
without S-Enhance



Chest AP
with S-Enhance

* These images were taken with GM85.



S-Enhance*

To support your diagnosis, S-Enhance improves the clarity of foreign bodies (e.g. tube, line and/or needle) in images of chest, abdomen, and L-spine. With a single on-screen click, the companion image is created without additional settings or x-ray exposure, streamlining the workflow.

* Option



SimGrid™*

With just a click, SimGrid™ allows you to provide better patient care with higher satisfaction and reduced retake rates without the use of a portable grid. It improves image contrast by reducing scatter radiation effects and creates better image quality.

* Option

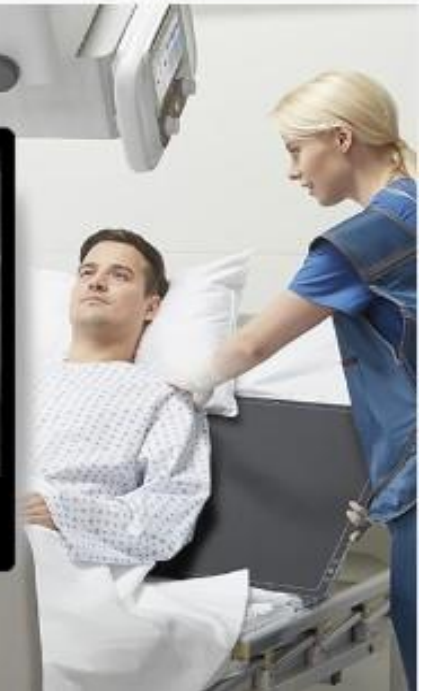


Chest AP
without Grid



Chest AP
with SimGrid™

* These images were taken with GM85.





Chest PA
without Bone Suppression



Chest PA
with Bone Suppression



Bone Suppression*

Without additional setting or exposure, Bone Suppression Imaging improves the clarity of soft tissues by suppressing the appearance of bones in chest images, which improves your ability to detect nodules. You can easily create the companion image with just a click on the screen.

* Option



Auto Lung Nodule Detection* **

Our first computer-aided detection solution helps boosting healthcare professionals to focus on their clinical needs. Multiple deep learning algorithms crafted for Auto Lung Nodule Detection help predict lung nodule in general chest radiography as a second reader.

* Option

** This feature is not commercially available in any country (No FDA/MFDS clearance).



Chest PA without
Auto Lung Nodule Detection



Chest PA with
Auto Lung Nodule Detection

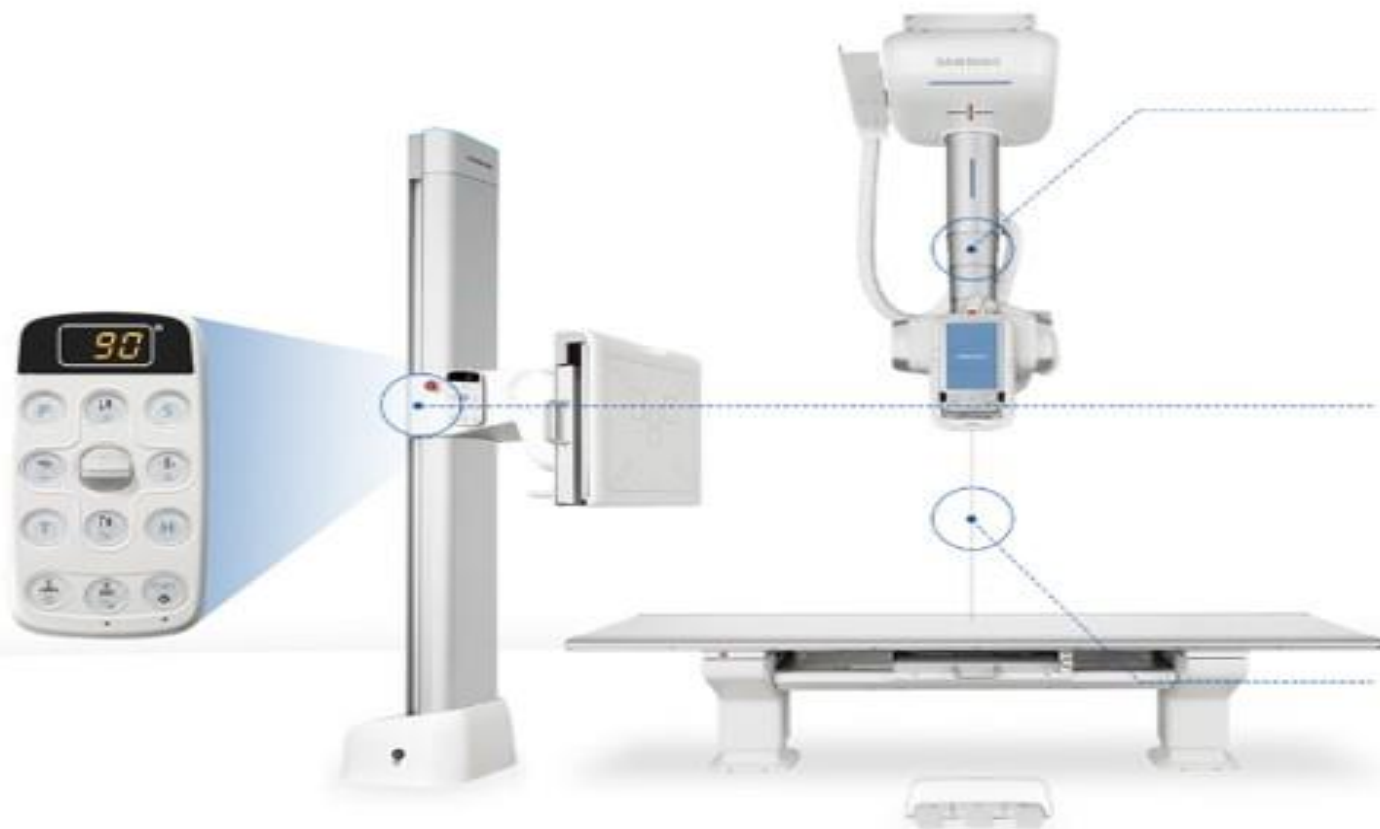
Wireless system

Wireless system provides data transfer with an integrated wireless system that includes a wireless iQuia™ Detector, remote control and wireless foot switch.

Streamline without Compromise

Fully Automated System

iQuia™ GC85A enables fully automated operation along with the THU, motorized wall stand and patient table.



Auto-positioning

Auto-positioning makes it move to more than 500 exam positions. The most frequently used position can be controlled with a handheld wireless remote control.

Motorized wall stand

With one touch of the control panel, you can precisely position the wall stand. The motorized receptor tilts from -30 degrees to 90 degrees, allowing you to easily move it to various positions with no need for a table.

Auto-tracking

Auto-tracking synchronizes the movement of tube and detector automatically reduces repetitive workflows.



Smart Stitching with S-Guide

Smart Stitching can increase comfort for patients who find it difficult to stand for long periods of consecutive shootings. Viewing a stitched image of a whole spine or long bone is more convenient for making accurate diagnoses. With S-Guide, patients are displayed on screen via camera view in order to simplify the stitching settings, reducing the necessity of retakes.

S-Align™

S-Align™ provides precise alignment for superior imaging and efficiency. When using iQuia™ Detector for free exams, S-Align™ displays the detector's angle to the THU for precise alignment and enhances the quality of imaging. Also, when the THU and detector are within a certain radius, the angle can be automatically aligned. This capability reduces repetitive exposure and saves time.





Soft Handling™

The Tube Head Unit (THU) can be moved into position gently with only a small amount of physical pressure from two fingers, so the operator avoids becoming fatigued from pulling the unit.

Expand PRESTIGE Experience

S-Share™*

S-Share™ can dramatically increase efficiency through the use of iQuia™ Detector with various existing compatible equipment. It enables accelerating connection for better synergy with prestige digital radiography systems.

* The S-Share of S4335-AW and S4343-AW is available only for iQuia™ GC85A, iQuia™ GM85, and GR40CW.



QAP*

QAP (Quality Assurance Program) assures maximized imaging performance in precise and cost-effective way. It enables comprehensive system management by automatic periodic test measuring multiple parameters such as source performance, AEC accuracy, geometry accuracy, and detector performance with image quality.

* Option



QAP Test Setup

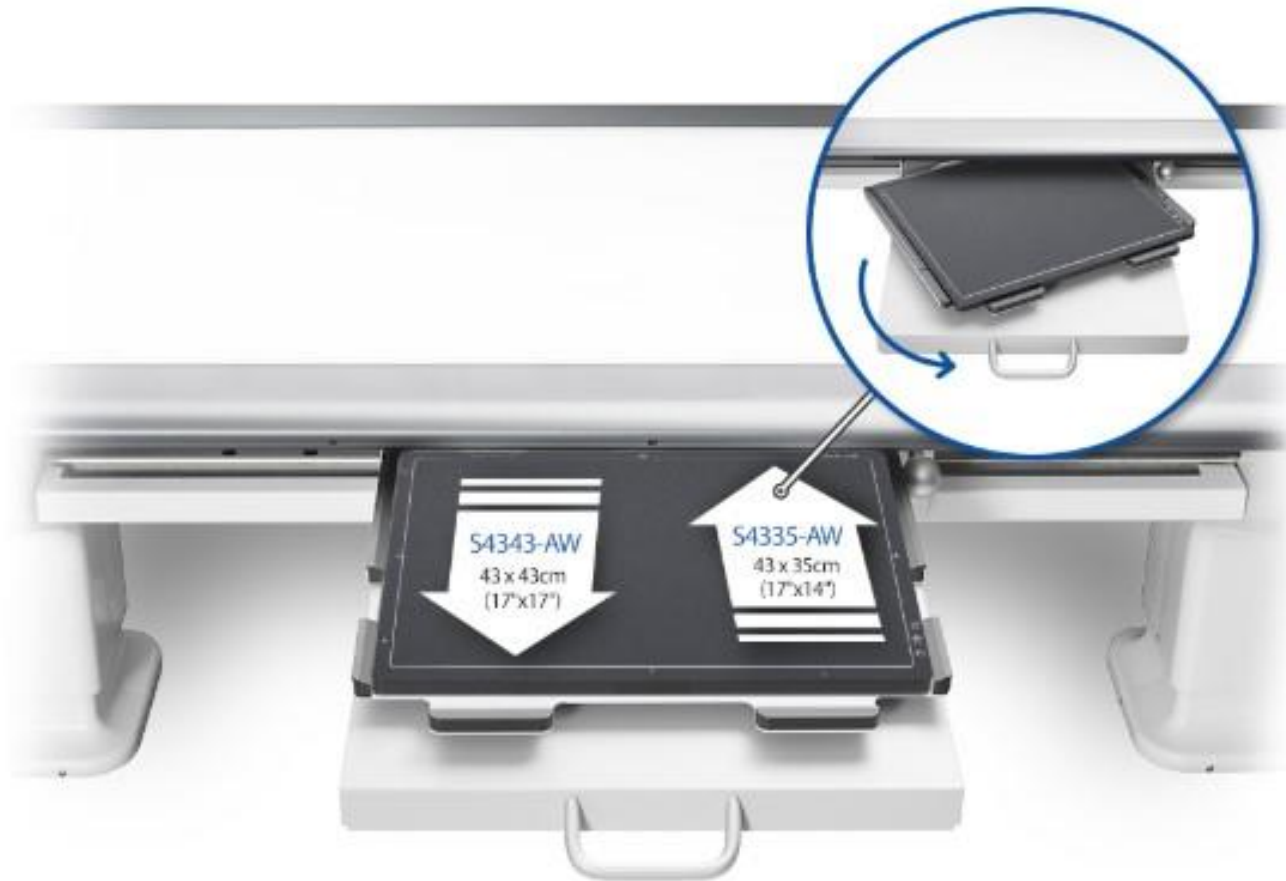


QAP Test Result

Shared Bucky™

Shared Bucky™ is designed for sharing multiple detector devices on one plate and can be used on a table with S4343-AW and S4335-AW.

Shared Bucky™ with S4335-AW can be placed in landscape and vertical directions to capture image such as tall patients' spines or obese patients' abdomen.



Save-Power Mode

When the equipment is in Standby mode the system supports Ready To Scan and Energy Save modes. Energy Save mode can lower power consumption by reducing electricity usage by half compared to Ready To Scan mode.



Wireless System

GC85 provides instant data transfer with an integrated wireless system (S-Detector, remote control and wireless foot switch). A remote control reduces unnecessary user movement.

Individual blade control

A 4-axis individual blade control function reduces unnecessary radiation dosage by enabling only specific radiation areas to be set as needed. This function is especially useful for pediatric chest examinations.

Dose reports for more efficient management

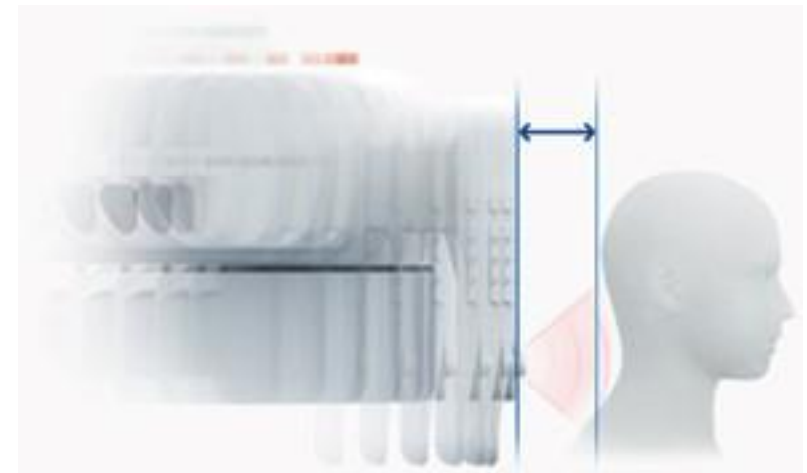
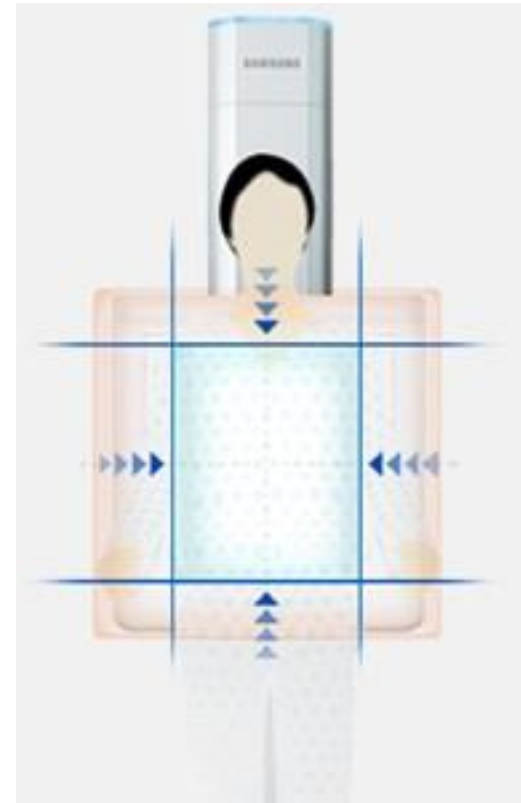
GC85A can send a variety of shooting condition information, such as Source to Image Distance (SID), Auto Exposure Control (AEC) and X-ray dose (mGy) information measured by the Dose Area Product (DAP), to the Picture Archiving and Communication System (PACS) to support effective dose management. The dose report can be saved, retained and used on a USB or DVD device in JPG or DICOM formats.

Auto Exposure Control (AEC)

Sensors automatically set the proper X-ray conditions based on measurements of the patient's body region thickness. This feature prevents excessive radiation exposure.

Collision avoidance system

Six sensors can detect patients' and users' movements to avoid collisions.



Secure Your Care

Samsung Healthcare Cybersecurity

Intrusion Prevention



Tools for protecting against cyber threats from external attacks

Access Control



Strengthened surveillance for tracking the access of patient information

Data Protection



Encryption functions for safeguarding data whether at-rest or in-transit