

ACCELERATING
EXPERIENCE

GM85 **Elite**



ACCELERATING EXPERIENCE

GM85 Elite

Premium mobile digital radiography system
GM85 Elite provides outstanding driving experience
and advanced applications to support enhanced
usability and high image quality.

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ADVANCED DRIVING
EXPERIENCE

02

INNOVATIVE ENHANCED
USABILITY

03

DIAGNOSTIC
CONFIDENCE



GM85 Elite at a Glance

Consistent Image Quality & Enhanced Usability

- **S-AEC***: True Wireless, Detector Built-in AEC
- **SimGrid™***: Improved Quality of Non Grid Images
- Lightweight Glass-Free Detector (43x35/43x43 size)
- Powerful Performance with Long-lasting Battery

Patient-focused, Pediatric-optimized Solution

- Low Dose with S-Vue™ Image Processing Engine
- Pediatric / Bariatric* Exposure Management
- Quiet Operation & Night Mode Supported
- Detector In-bin Charging* (30x25 size added)

ADVANCED DRIVING EXPERIENCE

Collapsible

Collapsible column with maximum height of 2,030 mm (6.7 ft) to secure a clear vision when driving the system.

2,030 mm(max.)
6.7 ft

New in Elite

Horn function
for safer driving

Light

GM85 only weighs 349 kg (769 lb) and allows easy maneuvering both in and out of elevators without worrying about the weight limit.

349 kg
769 lb

Compact

Easily access limited spaces with compact GM85 even in narrow hallways or tight spaces.

555 mm
21.9 in



INNOVATIVE ENHANCED USABILITY

27% Lighter† ACC™ Glass-Free Detector

The AccE Glass-Free Detector offers a more comfortable imaging experience. It is designed to relieve user fatigue by replacing a glass-based substrate with a lightweight, non-glass flexible panel. This glass-free technology not only makes it 27% lighter†, but also does not compromise the image quality with high DQE (76% @0lp/mm).



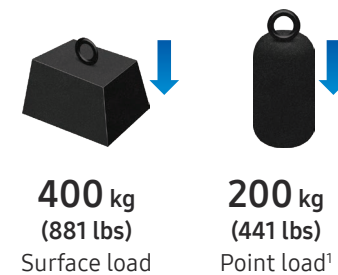
Lightweight

F4335-AW approx. **2 kg** (4.5 lbs)‡

F4343-AW approx. **2.5 kg** (5.5 lbs)‡

Reliable in Versatile Environment

Impressive load allowance along with dust and water resistance enables the detector to be actively implemented in versatile environments. The robust design allows for the reduction in user concern when performing exams in an OR and ER setting.



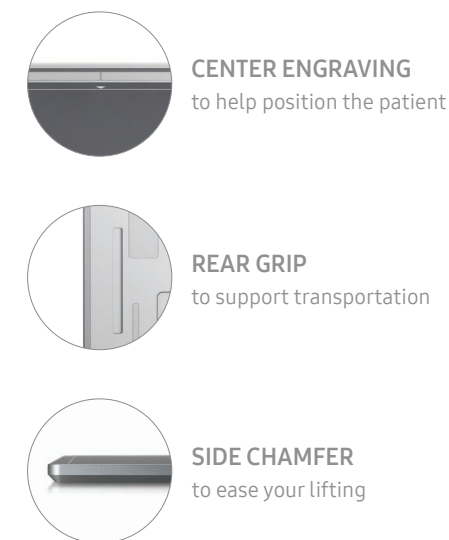
† Compared F4335-AW with S4335-AW without battery set

‡ Measured without battery set

1) Based on 40 mm diameter disc at the center

Enhance Your Daily Workflow

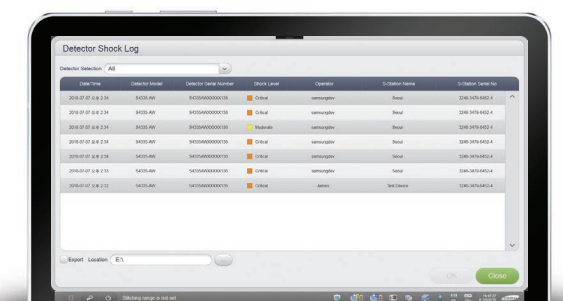
The user-centric design aids in efficiency and portability, alleviating daily burdens.



AccE Detector

Manage Your Detector Wisely

Continuous status tracking of the detector will enhance user confidence and improve the system's uptime. Features such as real-time shock sensing and detector auto correction will allow the detector to be in shape for use and help you respond quickly to critical detector shocks.



Real-time Shock Sensing

S-AEC* New in Elite

The new feature, detector built-in AEC, S-AEC enables consistent image quality in mobile imaging by precisely controlling radiation dose according to patient size. It is a truly wireless solution that requires no additional receptors or cables, and provides stable operation without concerns about detector direction, SID, or network latency.

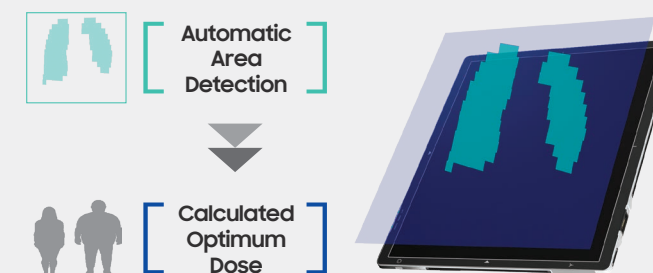


Image Auto Rotation*

In portable exams, radiologic technologists rotate images after the acquisition as the image orientation depends on the exam environment. Image Auto rotation detects the rotated angle of image and automatically rotates in the correct direction.

[Chest/Abdomen/Pelvis/Infantogram] 0°, 90°, 180°, 270° Rotation
[Hand/Foot] 1° Unit Rotation
(97% average accuracy)



INNOVATIVE ENHANCED USABILITY

54%
Longer²

Powerful Battery Performance

As the procedure volume of mobile x-ray increases to deal with a large number of patient volume, Samsung is focusing more on efficient mobile DR imaging based on its accumulated battery technology. The upgraded lithium-ion battery offers 54% longer operating time² than conventional GM85 on a single charge. Experience higher productivity and performance with GM85 Elite.



Rapid Charging ¹	All Day Operation ²	Max. Exposure ³	Sleep Mode Stand-by ⁴
Within 3~4 hours	500 exposures 50 km (31 miles) 10 hours	1,800 exposures	31 hours

1) 200 ~ 240 VAC < 3 hours, 100 ~ 127 VAC < 4 hours
2) Test condition : Chest AP / 80 kVp / 250 mA / 5 msec / 60 sec intervals, with driving at 5.6 km/h
3) Test condition : Chest AP / 80 kVp / 250 mA / 5 msec / 10 sec intervals, without driving
4) Stand-by 15 hours for LCD on, 31 hours for sleep mode, and 75 hours for power off

Less than
43 dB[†]

Quiet Operation for Care

GM85 allows low noise operations that do not disturb other patients. With **night mode** on, the screen color, temperature, and sound volume are accordingly adjusted. It will be a necessary function for taking x-ray exams in a quiet environment such as NICU. Its **quick exposure** feature is useful for pediatric patients who are not easy to maintain stationary posture.



American Academy of Pediatrics (AAP) recommendation in NICU ≤ 45 dB
† The noise level is less than 43 dB when the system is on stand-by.

SID Guide

SID Guide (Source to Image Distance) supports detailed device positioning with multiple SID settings.
(3 SID Types : 100/130/180 cm)



S-Align™

S-Align™ displays the detector's angle to the THU for precise alignment and enhances the quality of imaging. With S-Align™ Info. to DICOM* feature, the tube/detector angle information is inserted into the DICOM personal tag and added as annotations.



* Optional feature requiring additional purchase

INNOVATIVE ENHANCED USABILITY

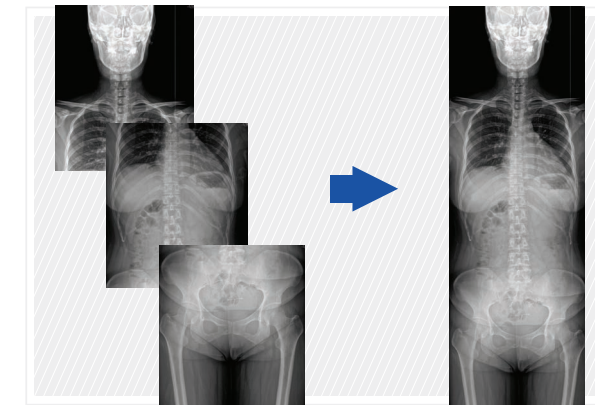
Prior Exam Review*

Prior Exam Review displays immediately previous images and exposure parameters of the patient being examined. Prior exams can be retrieved from both local systems and PACS server. This function simplifies the conventional 3-step process with one click. With a quick comparison, users can improve image consistency and reduce retakes.



Manual Stitching

Manual Stitching feature helps clinical staffs view x-ray images that are larger than the detectors area by combining multiple images into one.



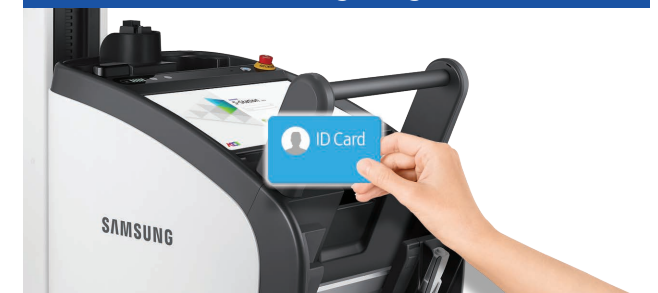
Images were taken with GR40CW.

Multi-touch Screen

Pinch gesture enables the user to zoom in and out while the two-touch shutter makes image cropping easy.



Embedded RFID Badge Tag*



Mirror View*

In the ER/OR or Trauma environments, multiple medical staff may often need to quickly acquire and check images in real-time. In such environments, Mirror View provides secured screen sharing using Wi-Fi CERTIFIED Miracast™. This function supports medical staff to check images together on a separate screen; it can reduce first aid response time and the risk of contamination.

Samsung DR Cybersecurity



Samsung's Defense-in-depth

- Designed holistic protection for your critical assets with multi-layered security controls: physical, operating system hardening, network, access control, application, and data layers

World-class Management System

- Received independent certification including ISO/IEC27001, ISO/IEC27701
- Comply with Risk Management Framework (RMF) according to NIST SP 800-53

Government-grade Security

- Achieved government agency security including Authority to Operate (ATO) for the U.S. Department of Defense



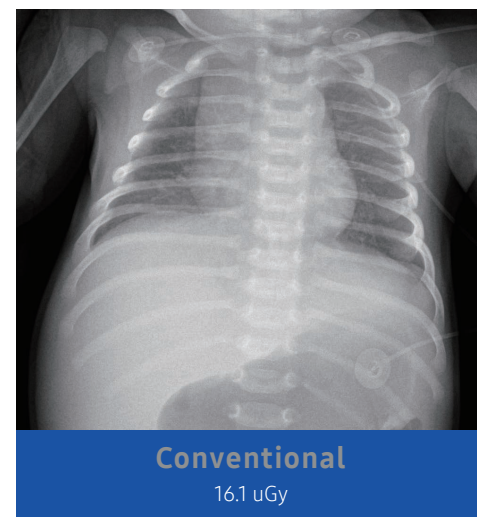
DIAGNOSTIC CONFIDENCE

S-Vue™ in Pediatric X-rays

Underaged patients are more radiosensitive than adults. Therefore, diagnostic x-rays should be justified and optimized to reduce unnecessary exposures, especially for pediatric patients. To alleviate these concerns, the new S-Vue™ engine helps achieve the optimal dose level for children during pediatric x-ray scans. The dose level can be reduced up to 45% for pediatric abdomen, 15.5% for pediatric chest, and 27% for pediatric skull exams with the new S-Vue™ engine. This is especially significant as abdomen protocols may include genital regions.



Case. Pediatric Chest AP¹



(54 kVp / 1.42 mAs / 0.06 dGy*cm² / 0.1 mmCu Filter)

15%
Dose Reduction



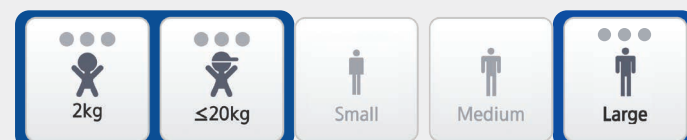
(54 kVp / 1.21 mAs / 0.05 dGy*cm² / 0.1 mmCu Filter)

Images were taken with GM85.

Coverage for a wide range of body types

GM85 supports **6-stage Pediatric Exposure Management** according to weight and **Bariatric Exposure Management*** (X-Large/2X-Large) to avoid unnecessary x-ray exposure using precise dose, resulting in excellent image quality.

Patient Size

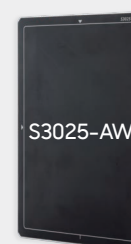


* Optional feature requiring additional purchase

New in Elite

30x25 detector in-bin charging*

Pediatric cover design*



Low Dose in S-Vue™

S-Vue™ not only provides excellence in 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.



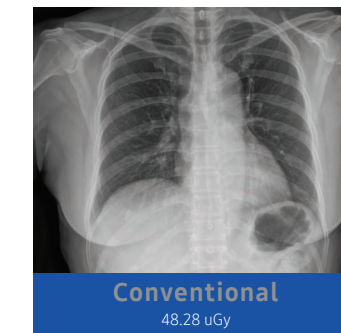
Our Pledge for Low Dose

Samsung's Low Dose campaign is going to change your ordinary X-ray experience into our low dose imaging experience. Our commitment to lower dose will help you give more care to the ones you love. We will accompany you as a lifetime partner in the right way.

S-Vue™ in Adult Chest X-rays

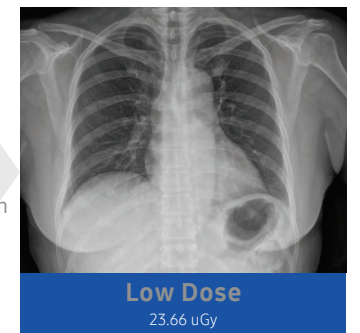
Chest x-ray scans are the most frequent radiography examinations for patients in hospitals. Therefore reducing dose in chest x-rays is significant as it allows scans to be taken with reduced dose level for increasing number of patients. With new S-Vue™ processing engine, it cuts dose by 50% to low dose level while keeping the image at high quality.

Case. Adult Chest PA¹



(BMI 25.6 / 120 kVp / 1.70 mAs / 0.85 dGy*cm²)

51%
Dose Reduction



(BMI 25.6 / 120 kVp / 0.85 mAs / 0.42 dGy*cm²)

Images were taken with GC85A.

S-Vue™ in Adult Abdomen X-rays

Dose exposure during abdomen x-ray scan is rather high in comparison to chest or other x-ray scans, making the dose reduction of this procedure critical. The new S-Vue™ engine allows up to 47.5% decrease in dose exposure with no compromise in image quality for better patient care.

Case. Adult Abdomen¹



(80.3 kVp / 5.91 mAs / 3.79 dGy*cm² / None Filter)

43%
Dose Reduction

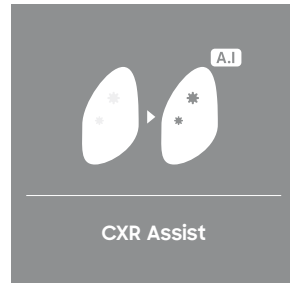


(72.3 kVp / 8.02 mAs / 3.12 dGy*cm² / 0.1 mmCu Filter)

Images were taken with GC85A.

1) 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, K180543, 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.

DIAGNOSTIC CONFIDENCE



CXR Assist*

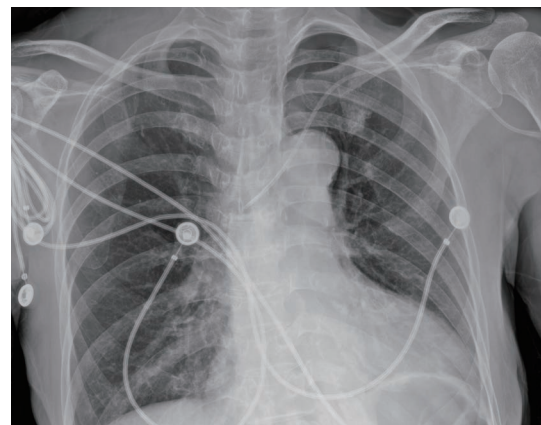
CXR Assist with Lunit INSIGHT CXR helps you diagnose more efficiently and accurately by automatically detecting 10 of most common thoracic radiologic findings and supporting Tuberculosis Screening.

10+

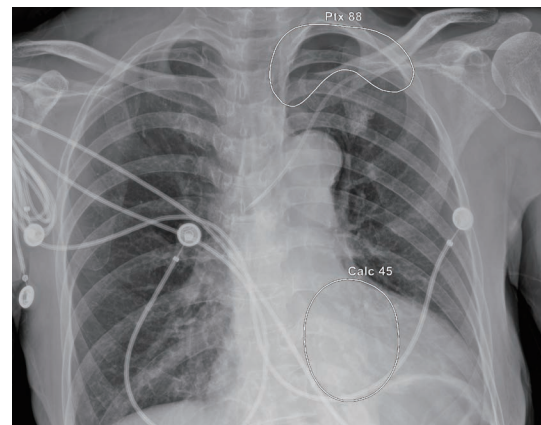
Nodule · Consolidation · Pneumothorax · Pleural Effusion · Atelectasis · Pneumoperitoneum · Cardiomegaly · Mediastinal Widening · Calcification · Fibrosis + Tuberculosis Screening

Case. Chest AP

Images were taken with GM85.



Without CXR Assist



With CXR Assist

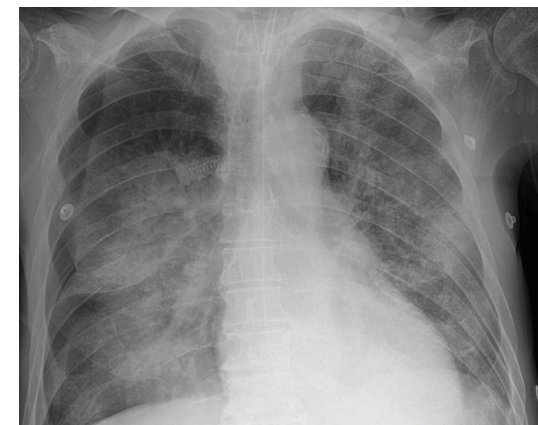


S-Enhance*

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.

Case. Chest AP

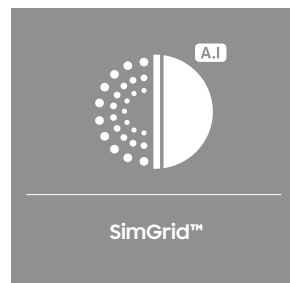
Images were taken with GM85.



Without S-Enhance



With S-Enhance

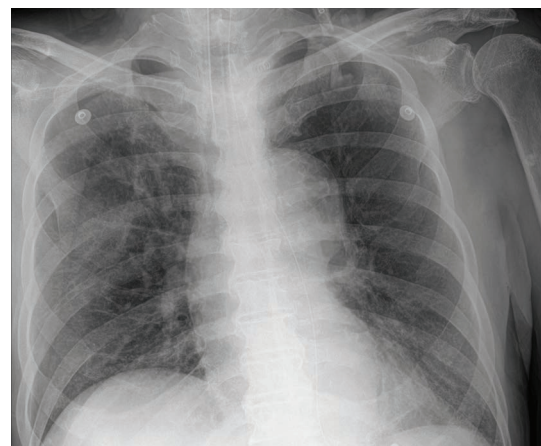


SimGrid™*

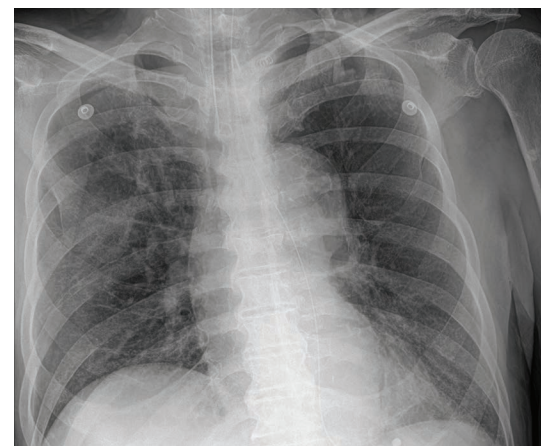
With just a click, SimGrid™ allows you to provide better patient care with higher satisfaction and reduced retake rates without the use of a portable grid. It improves image contrast by reducing scatter radiation effects and creates better image quality. The 3-step intensity control (Low/Medium/High) enables customized image processing.

Case. Chest AP

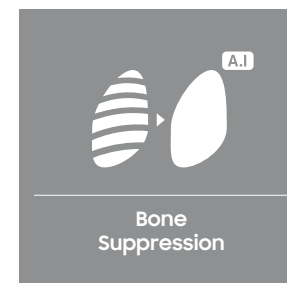
Images were taken with GM85.



Without Grid



With SimGrid™

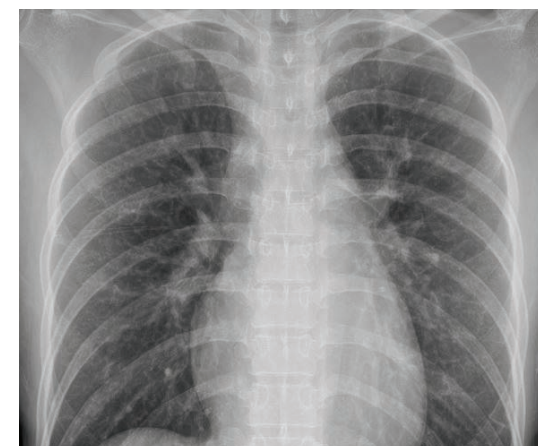


Bone Suppression*

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.

Case. Chest PA

Images were taken with GC85A.



Without Bone Suppression



With Bone Suppression

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The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, medical equipment, network systems, and semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at news.samsung.com.

GM85 Elite Catalog v3.6-250211-CE

GM85 Elite is a sub-configuration of GM85.



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129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea

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