ACCELERATING EXPERIENCE

GM85 Elite

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GM85 Elite

GM85 Elite is a premium mobile digital radiography system providing an outstanding driving experience and advanced applications to support enhanced usability and high image quality.

Low Dose

S-AEC *

S-Vue™

01
ADVANCED DRIVING EXPERIENCE

02
INNOVATIVE ENHANCED USABILITY

03
DIAGNOSTIC CONFIDENCE

GM85 Elite is a sub-configuration of GM85.

GM85 Elite at a Glance

Consistent & Enhanc

Patient-
Pediatric-opt

AccE Glass-Free Detector

Compact & Light

Time Saver Battery

CXR Assist

A.I

SimGrid™ *

A.I

Cybersecurity

Remote Software Update
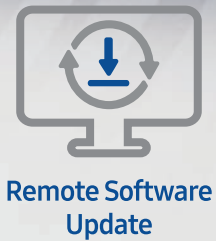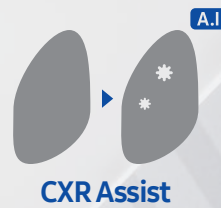
SAMSUNG
GM85 Elite

Image Quality
ced Usability

- **S-AEC***: True Wireless, Detector Built-in AEC
- **SimGrid™ ***: Improved Quality of Non Grid Images
- Lightweight Glass-Free Detector (14x17 or 17x17 size)
- Powerful Performance with Long-lasting Battery

-focused,
imized Solution

- Low Dose with S-Vue™ Image Processing Engine
- Pediatric / Bariatric* Exposure Management
- Quiet Operation & Night Mode Supported
- Detector In-bin Charging* (10x12 now available)

ADVANCED DRIVING EXPERIENCE

Collapsible

Collapsible column with maximum height of 6.7 ft (2,030 mm) 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 769 lb (349 kg) 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 † AccE™ 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).

New in Elite

F4343-AW

SAMSUNG

F4335-AW

Lightweight

F4335-AW approx. **4.5 lbs** (2 kg)‡

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

IP57

Reliable in Versatile Environment

Impressive weight capacity 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.

881 lbs
(400 kg)
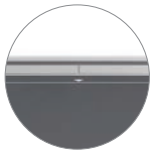Surface load

441 lbs
(200 kg)
Point load[1]

† 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.

CENTER ENGRAVING
to help position the patient

REAR GRIP
to support transportation

SIDE CHAMFER
to ease your lifting

S4343-AW

S4335-AW

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.
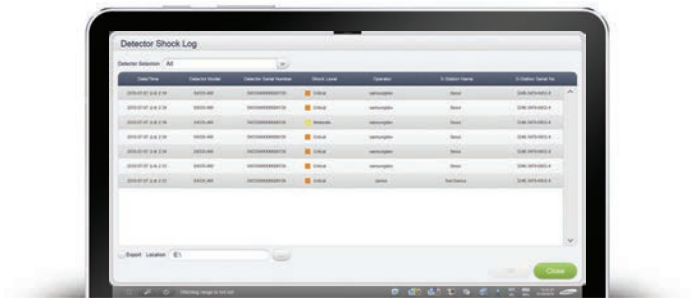
Real-time Shock Sensing

S-AEC* [New in Elite]

The new detector built-in AEC feature, 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.

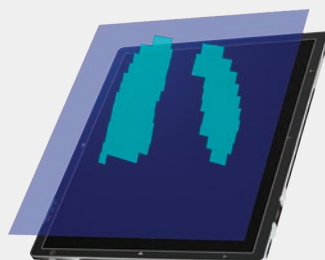**Automatic Area Detection**

Calculated Optimum Dose

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)

Auto Rotation
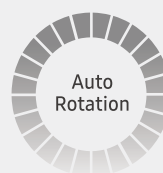
A.I

INNOVATIVE ENHANCED USABILITY

54 % Longer [2]

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 time[2] than conventional GM85 on a single charge. Experience higher productivity and performance with GM85 Elite.

Powered by
Lithium-ion Battery

Lead -free ✓

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 has low noise operations that do not disturb other patients. With **night mode** on, the screen color, temperature, and sound volume adjust accordingly. This function is necessary for x-ray exams in quiet environments such as the NICU. Its **quick exposure** feature is useful for pediatric patients who do not maintain stationary posture for long periods of time.

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.

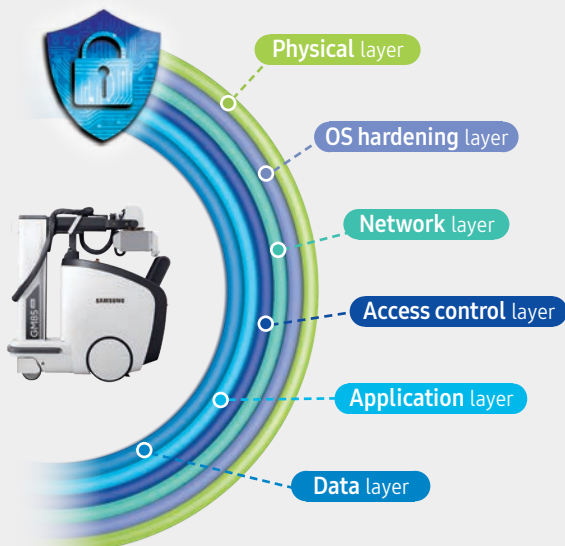30°

* Optional feature requiring additional purchase

INNOVATIVE ENHANCED USABILITY

Prior Exam Review*

Prior Exam Review immediately displays 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.

Different parameters are labeled.

PACS server

Local system

Samsung DR Cybersecurity

Physical layer

OS hardening layer

Network layer

Access control layer

Application layer

Data layer

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

Manual Stitching*

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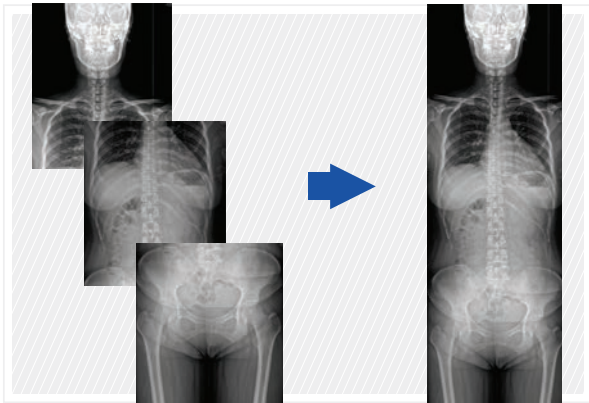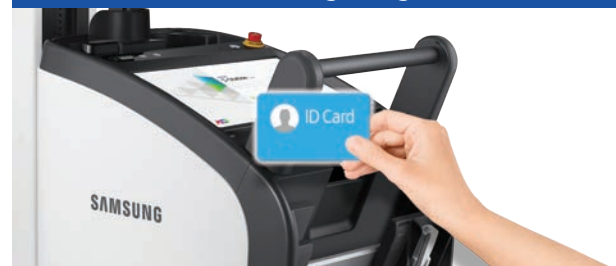

Images were taken with GR40CW.

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*1

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 medical response time and the risk of contamination.

1) When using Mirror View, the image transmitted via Miracast™ is not available for the purpose of diagnosis.

DIAGNOSTIC CONFIDENCE

S-Vue™ in Pediatric X-rays

Our youngest 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 AP[1]

Images were taken with GM85.

15%
Dose Reduction
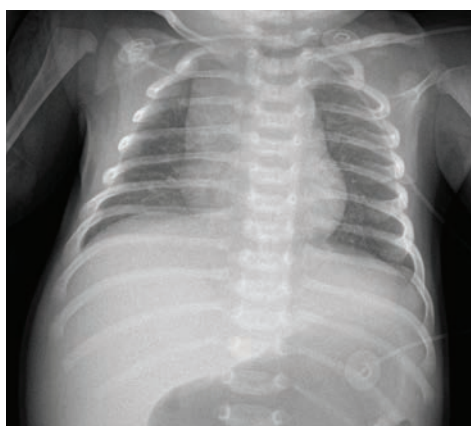
| Conventional	Low Dose
16.1 uGy	13.7 uGy
(54 kVp / 1.42 mAs / 0.06 dGy*cm² / 0.1 mmCu Filter)	(54 kVp / 1.21 mAs / 0.05 dGy*cm² / 0.1 mmCu Filter)

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.
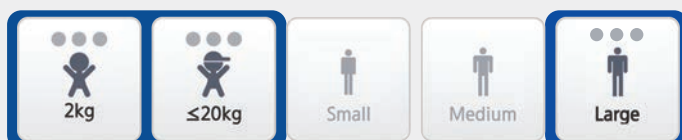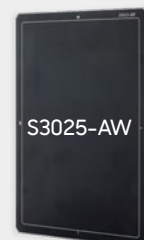
New in Elite

10x12 detector
in-bin charging*

S3025-AW

Pediatric cover
design*

Patient Size

2kg	≤20kg	Small	Medium	Large

* Optional feature requiring additional purchase

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 PA [1]
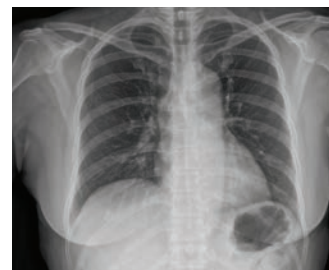
Conventional
48.28 uGy

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

51% Dose Reduction

Low Dose
23.66 uGy

(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 Abdomen [1]

Conventional
410.36 uGy

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

43% Dose Reduction

Low Dose
232.98 uGy

(72.3 kVp / 8.02 mAs / 3.12 dGy*cmcm² / 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 calculates 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
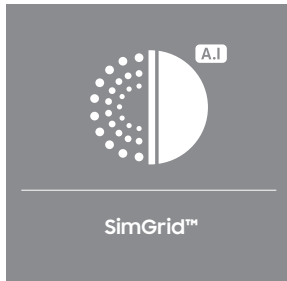
SimGrid™*

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™

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

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.
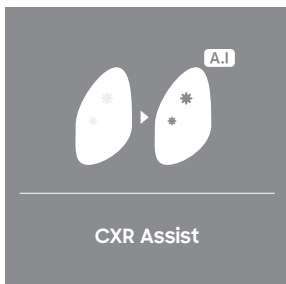
Case. Chest PA

Images were taken with GC85A.

Without Bone Suppression
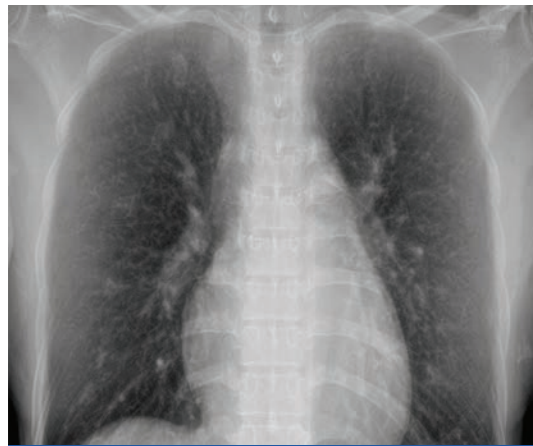
With Bone Suppression

CXR Assist*

CXR Assist with Lunit INSIGHT CXR Triage (FDA cleared - K211733) analyzes adult chest X-ray images for the presence of pre-specified suspected critical findings (Pleural effusion and or Pneumothorax). Seamlessly connected to the PACS workstation, this feature prioritizes exams for the radiologists. Enabling timely treatment for critical or urgent patients and improving overall efficiency.

AI Results		ID	Age	Time
Pef	Ptx			
●		18291CCEE	18	10:50 AM
	●	23075CCEE	63	12:15 PM
		29110CCEE	26	10:12 AM
		31291CCEE	33	10:21 AM
		11007CCEE	43	10:36 AM

S-Station/PACS Worklist Prioritization

This PACS worklist is intended to help healthcare professionals understand the functions of this product. Please note that this worklist may differ from the actual product.

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the future with transformative ideas and technologies.
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medical equipment, network systems, and semiconductor
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GM85 Elite is a sub-configuration of GM85.

Scan code or visit
www.samsunghealthcare.com
to learn more

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