

# ACCELERATING EXPERIENCE



**SAMSUNG**

## Mechanic

Column Type	Collapsible
Column Height	Min. 1,396 mm / Max 2,152 mm
SIZE (W (cm) x L (cm) x H (cm))	55.5 x 125.8 x 139.6
Weight (kg)	349
Tube Reach (cm)	79.3 ~ 135.5 (Center of column to Focal spot)
Focal Spot Range (cm)	55 ~ 203
Column Rotation	±315°
Tube Rotation (arm axis)	±180°
Tube Rotation (tube axis)	+90° ~ -30°

## HVG

	Type A	Type B
Power (kW)	32	40
kVp	40 ~ 150 (1 kV step)	40 ~ 150 (1 kV step)
mA	10 ~ 500	10 ~ 500
mA s	0.1 ~ 500	0.1 ~ 500
Exposure time range	From 1 ms to 10 seconds	From 1ms to 10 seconds
Exposure Parameter Setting @Max. Power Rating	49 kV 400 mA 64 kV 500 mA 80 kV 400 mA 100 kV 320 mA 128 kV 250 mA 150 kV 200 mA	49 kV 400 mA 80 kV 500 mA 100 kV 400 mA 125 kV 320 mA 150 kV 250 mA
Generator frequency*	30 kHz / 50 kHz	30 kHz / 50 kHz

\* Depending on the HVG type

## Tube

Nominal Tube Voltage (kVp)	150
Heat Capacity (kHU)	300
Anode Angle	14°
Focal Spot (mm)	0.6 / 1.2
Anode speed	min. 3,200/min (60 Hz)
X-ray heat storage capacity of tube	1,056 kHU (750 kJ)

## Collimator

Type	4-axis auto blade
Light	LED
Additional Filter	0.1, 0.2, 0.3 mmCu (Auto)
Illuminance	> 160 lux
Inherent Filtration	Over 1.4 mmAl @75kVp
Rotation Angle	-90 ~ 180° (Total 270°)
ETC	Measuring Tape DAP Integration*

\* Optional

## Driving

Speed	Max. 5.6 km/h
Soft Driving*	Provided
Slope	Max. 7 deg
Bumper sensor	Provided
Emergency Brake Release	Provided

\* The adaptive driving control with sensing the force of user.

## Battery

Type	Li-ion Battery
Input Outlet	Free Voltage (100-240VAC, 50/60Hz)
Charge Time*	Approx. 4 hours - 200-240VAC < 3 hours - 100-127VAC < 4 hours

\* Depends on capacity of outlet

## Display

Type	Main	Sub(THU)
Size	21.5"	7"
Resolution	1,920 x 1,080 (FHD)	800 x 480
Touch	Provided	Provided

## Workstation

Hardware	
CPU	Intel Core i7
RAM	8G or more
Storage	SSD 128GB + HDD 1TB - Image storage capacity S4343-AW : ~ 12,000 images S4335-AW : ~ 14,000 images S3025-AW : ~ 30,000 images
OS	Microsoft Windows 7 or later
Software	
Image acquisition times* (X-ray exposure to image)	S4343-AW(Tethered) : Preview < 2 sec, Final < 5 sec S4343-AW(Wireless) : Preview < 2 sec, Final < 6 sec S4335-AW(Tethered) : Preview < 2 sec, Final < 4 sec S4335-AW(Wireless) : Preview < 2 sec, Final < 5 sec S3025-AW(Wireless) : Preview < 3.5 sec, Final < 6 sec
* It depends on the image processing parameters and wireless condition	
Post processing	S-Vue™
Display functions	Window level control, Zoom / Magnifier. Flip / Rotate, Invert, Shutter (Fixed / Auto / Manual) Annotations (Marker / Free text / Arrow / Line / Length / Angle / Cobbs angle / Rectangle / Ellipse) Layout (1×1, 1×2, 2×1, 2×2)
Auto cropping	Auto shutter
Auto APR* matching	X-ray conditions, Image processing parameters, Marker etc
Multi-language	English, French, German, Italian, Spanish, Russian, Simplified Chinese, Portuguese, Turkish, Finnish, Swedish, Czech, Polish
Dose Report	List patient dose information Send dose information to a PACS Export to DVD/USB through JPG/DICOM format

\* Anatomical Programmed Radiography

## Features

	Description
SID Guide	Intuitive laser guide helps to align SID
Quick Positioning	Moving System forward/backward or rotation CW/CCW by THU button
Pediatric Exposure Management	Providing subdivided exposure conditions of child and baby
S-Align™*	Improving alignment of detector and tube by providing the angles of detector and tube
Detector charging	Charging detector automatically in the cabinet
System status indicating LED	Indicating x-ray exposure ready/shot and emergency status
Keyless access	Accessing to system with pin code on THU display
Quick Link	Easy access to existing RIS/HIS/PACS system in the S-Station

\* This feature is only for S4335-AW, S4343-AW detector

## H/W Optional Items

	Description
Wireless Hand Switch	Bluetooth or Infrared type
Bar Code Scanner	Minimum resolution : typical 3 mil
H-DAP	Quality Equivalent Filtration : 0.2mmAL @70kVp
DVD-RW	External USB type
Portable Grid for 4335*	SID : 130 cm, 6:1, 85 lp/cm
Portable Grid for 4343*	SID : 130 cm, 6:1, 85 lp/cm
Attachable Tether Cable (7M)	For Charging & Transferring image from detector to system
LAN Cable (3M)	For Transferring image to PACS
Pediatric Cover Design	Refer to the design in the brochure
RFID Reader	RFID badge scan for login (Support 125kHz, 13.56MHz) (Recommend card type : HID Prox / iCLASS ID)
In-bin charging	Integrated charging cable for S3025-AW/AWM
AC/DC Adaptor	Charging Adaptor for S3025-AW/AWM

\* Portable Grid for S4335-AW, S4343-AW requires additional service parts for combining together

## S/W Optional Items

	Description
SimGrid™	Enhancing the visibility of image without physical grid by compensating the decrease in contrast caused by scatter radiation
Bone Suppression	Improving the clarity of soft tissues by suppressing the appearance of bones in chest images
Auto Lung Nodule Detection	ALND helps users find lung nodules on x-ray Chest PA images.
S-Enhance	Enhancing visibility of foreign body in chest, abdomen and l-spine images
Remote View	Transferring configured image through a web browser using the IP address
Manual Stitching	Allow manual stitching of multiple images
QAP Package	Quality Assurance Program and AI Filter/Phantom
S-DAP	Software DAP(Dose Area Product)
S-Share™ <sup>1</sup>	Sharing detectors between GM85 and Samsung DR system
WBS Activation	Support verified wireless barcode scanner - Refer to the verified scanner list - Interface(Host/Wireless Scanner) : USB Serial/Bluetooth(2.4GHz-2.5GHz, ISM)
Value-up Package <sup>2</sup>	Flat GUI / Image Auto Rotation / Additional Patient Information S-Align™ Info. to DICOM / Detector Connection Alarm / Prior Exam Review / Bariatric Exposure Management
Mirror View	Provide secured screen sharing of S-Station to the display device using Wi-Fi CERTIFIED Miracast™

1) There are restrictions on sharing between detectors, please refer to separate guide.

2) S-Align™ Info. to DICOM is only for S4335-AW, S4343-AW detector

## AccE Detector

<b>Wireless Portable Detector</b>	
Detector model	S4335-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions	460 x 384 x 15 mm
Active detector matrix (Effective Pixel matrix)	3,040 × 2,466 pixels
Effective area	425.60 mm × 345.24 mm
Pixel pitch	140 μm
A/D conversion (Pixel depth)	16 bits
Spatial resolution	3.57 lp/mm
Detective Quantum Efficiency (DQE)	76% (0.0 lp/mm, Typical)
Modulation Transfer Function (MTF)	86% (0.5 lp/mm, Typical)
Installation	Wireless / Tethered
Image Acquisition	Tethered / Wireless (802.11 a/b/g/n & ac) @2.4/5 GHz
AED	Available, v3.0
Weight	Approx. 3 kg
Max.load capacity	400 kg for uniform load, 200 kg for local load (40 mm in diameter disk at the center)
Max.bend capacity	> 200 kg @ 3-point bending condition
Dust/Water-resistance	IP54
Self diagnosis	Automatic detection & alarming of line artifact
Detector shock logging*	Real-time detection, logging and alarming of shock level
Battery charging time	Typ. 6 hrs. (tethered), Typ. 3 hrs. (battery charger)
Battery Operation Time	500 images for 4 hrs. Waiting for more than 10 hrs under deep sleep mode

\*This feature is only for S4335-AW, S4343-AW detector

<b>Wireless Portable Detector</b>	
Detector model	S4343-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions	460 x 460 x 15 mm
Active detector matrix (Effective Pixel matrix)	3,040 × 3,036 pixels
Effective area	425.60 mm × 425.04 mm
Pixel pitch	140 μm
A/D conversion (Pixel depth)	16 bits
Spatial resolution	3.57 lp/mm
Detective Quantum Efficiency (DQE)	76% (0.0 lp/mm, Typical)
Modulation Transfer Function (MTF)	86% (0.5 lp/mm, Typical)
Installation	Wireless / Tethered
Image Acquisition	Tethered / Wireless (802.11 a/b/g/n & ac) @2.4/5 GHz
AED	Available, v3.0
Weight	Approx. 3.6 kg
Max.load capacity	400 kg for uniform load, 200 kg for local load (40 mm in diameter disk at the center)
Max.bend capacity	> 200 kg @ 3-point bending condition
Dust/Water-resistance	IP54
Self diagnosis	Automatic detection & alarming of line artifact
Detector shock logging*	Real-time detection, logging and alarming of shock level
Battery charging time	Typ. 6 hrs. (tethered), Typ. 3 hrs. (battery charger)
Battery Operation Time	500 images for 4 hrs. Waiting for more than 10 hrs under deep sleep mode

\*This feature is only for S4335-AW, S4343-AW detector

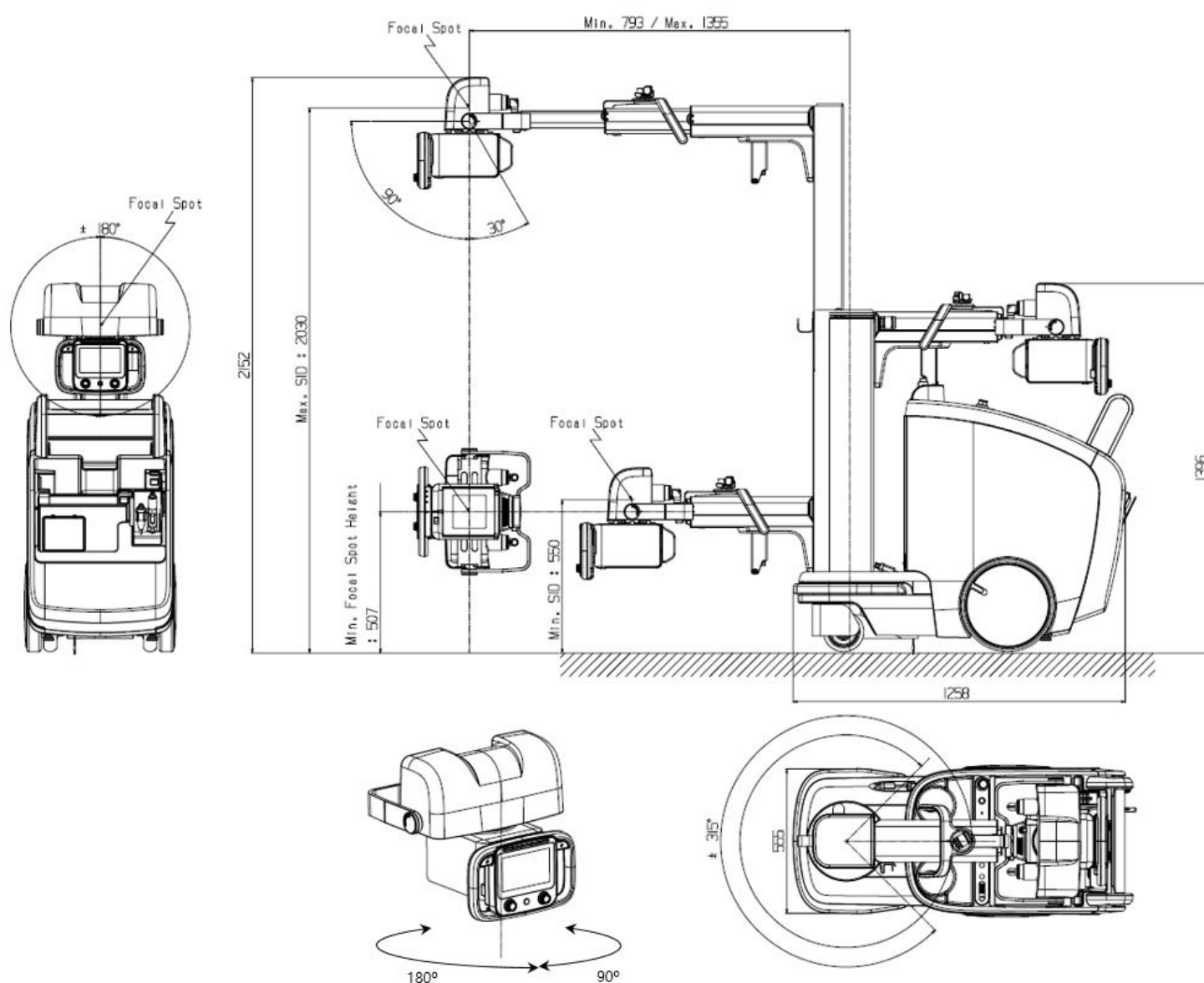
## AccE Detector

Wireless Portable Detector	
Detector model	S3025-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions	350 x 287 x 15 mm
Active detector matrix	2536 x 2024 pixels (W x H)
Effective area	314.5 mm × 251.0 mm (W x H)
Pixel pitch	124 $\mu$ m
A/D conversion (Pixel depth)	16 bits
Spatial resolution	4.0 lp/mm
Detective Quantum Efficiency (DQE)	75% (0 lp/mm, Typical)
Modulation Transfer Function (MTF)	87% (0.5 lp/mm, Typical)
Installation	Wireless only
Image Acquisition	Wireless (802.11 n/ac) @2.4/5 GHz
AED	N/A
Weight	2.1 kg (Typical)
Max.load capacity	400 kg for uniform load, 200 kg for local load (40 mm in diameter disk at the center)
Dust/Water-resistance	IP67
Self diagnosis	Automatic detection & alarming of line artifact
Battery charging time	2 hrs. (AC-DC adaptor)
Battery Operation Time	270 images for 7.5 hrs

# GM85

## Mechanical Specifications Collapsible column type

Length	Width	Height	Weight
1,258 mm	555 mm	Minimum 1,396 mm Maximum 2,152 mm	349 kg



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