FUNDAMENTALLY DIGITAL

# GR40CW



## **GR40CW**

#### **AccE Detector**

Wireless Portable Detector	
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	425.6 mm × 345.24 mm
Pixel pitch	140 <i>µ</i> m
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

<sup>\*</sup> This feature is only for S4335-AW, S4343-AW detector

#### Wireless Portable Detector

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 <i>µ</i> m
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

<sup>\*</sup> This feature is only for S4335-AW, S4343-AW detector

## **GR40CW**

#### **AccE Standard Detector**

Wireless Portable Detector	
Detector model	S4335-AWM
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	425.6 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)	65% (0.0 lp/mm, Typical)
Modulation Transfer Function (MTF)	88% (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. 3.2 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
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

Wireless Portable Detector	
Detector model	S4343-AWM
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 <i>µ</i> m
A/D conversion (Pixel depth)	16 bits
Spatial resolution	3.57 lp/mm
Detective Quantum Efficiency (DQE)	65% (0.0 lp/mm, Typical)
Modulation Transfer Function (MTF)	88% (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
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

## **GR40CW**

#### **Gadox Detector**

Wireless Portable Detector	
Detector model	S4335-AWV
Detector type	Amorphous Silicon TFT / Gadolinium oxysulfide scintillator (Gadox)
Dimensions	460 x 384 x 15 mm
Active detector matrix (Effective Pixel matrix)	3,040 × 2,466 pixels
Effective area	425.6 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)	40% (0.0 lp/mm, Typical)
Modulation Transfer Function (MTF)	78% (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. 2.9 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
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

### 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	
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	
S-Share™*	Sharing detectors between GR40CW and Samsung DR system	
Value-up Package	Image Auto Rotation / Additional Patient Information / Bariatric Exposure Management / Easy Protocol Management / Smart Crop Management	
Mirror View	Provide secured screen sharing of S-Station to the display device using Wi-Fi CERTIFIED Miracast™	

 $<sup>\,\,^{\</sup>star}$  There are restrictions on sharing between detectors, please refer to separate guide.

### **GR40CW**

### Power Supply Box

Dimension	208 mm x 155 mm x 65 mm (W x D x H)
Weight	Typ. 1.2 kg

#### **Battery Recharger**

Detector model	S4335-AW/AWM/AWV, S4343-AW/AWM
Dimension	286 mm x 148 mm x 16 mm (W x D x H)
Weight	Typ. 0.3 kg

### **Imaging Workstation - S-Station**

Hardware	
- CPU	Intel Core i3
- RAM	8 GB
- Storage	SSD1TB - Image storage capacity S4343-AW/AWM : ~12,000 images S4335-AW/AWM/AWV : ~14,000 images - Hard drive encryption
- Operating system	Microsoft Windows 7 or later
- Monitor* * Optional	FHD 23.6" LCD Monitor (1920 × 1080)
Software	
- Image acquisition times* (X-ray exposure to image)	S4343-AW/AWM(Tethered): Preview < 2 sec, Final < 5 sec S4343-AW/AWM(Wireless): Preview < 2 sec, Final < 6 sec
	S4335-AW/AWM/AWV(Tethered) : Preview < 2 sec, Final < 4 sec S4335-AW/AWM/AWV(Wireless) : Preview < 2 sec, Final < 5 sec
* It depends on the image processing parameters and wireless condition	S4335-AW/AWM/AWV(Tethered) : Preview < 2 sec, Final < 4 sec
	S4335-AW/AWM/AWV(Tethered): Preview < 2 sec, Final < 4 sec S4335-AW/AWM/AWV(Wireless): Preview < 2 sec, Final < 5 sec  S-Vue <sup>TM</sup> - Protocol(Body part) adaptive multi scale image processing - Advanced noise reduction processing
and wireless condition	S4335-AW/AWM/AWV(Tethered): Preview < 2 sec, Final < 4 sec S4335-AW/AWM/AWV(Wireless): Preview < 2 sec, Final < 5 sec  S-Vue™ - Protocol(Body part) adaptive multi scale image processing
and wireless condition  - Post processing	S4335-AW/AWM/AWV(Tethered): Preview < 2 sec, Final < 4 sec S4335-AW/AWM/AWV(Wireless): Preview < 2 sec, Final < 5 sec  S-Vue™ - Protocol(Body part) adaptive multi scale image processing - Advanced noise reduction processing - Excess contrast reduction processing for minimizing metal artifact Window level control, Zoom / Magnifier. Flip / Rotate, Invert, Shutter (Fixed / Auto / Manual) Annotations (Marker / Free text / Arrow / Line / Length /Angle / Cobbs angle / Rectangle / Ellipse)

<sup>\*</sup>Optional (Select 1 of 3 kinds of monitors)

### **GR40CW**

#### CIB

Dimension	98 mm x 57 mm x 28 mm (W x D x H)
Weight	Approx. 0.14 kg

#### **Network Specifications**

DICOM functions	
- DICOM Verification	
- DICOM Modality worklist	Interface with HIS / RIS with auto refresh option
- DICOM MPPS	Send the status of exams to HIS / RIS
- DICOM Storage	Send Image (DX or CR IOD) and GSPS to PACS
- DICOM Storage commitment	
- DICOM Grayscale print	Support DICOM printers
- DICOM Query / Retrieve	Query and retrieve DX and CR images from PACS
- DICOM GSPS	Send overlay information along with the image
- DICOM Media exchange (DICOM DIR)	Patient images export to DVD/CD

#### Remote Maintenance System (RMS)

The remote management system analyses performance and emerging technical issues.

Real-time use information	Automatic error transfer to Samsung
Remote access	Software remote diagnosis Hardware remote diagnosis

<sup>\*</sup> GR40CW is not compatible with "Fluoroscopy" or products using "Moving grid"

#### About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems, and semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at news.samsung.com.

#### For more information

For more information about GR40CW, visit

www.samsunghealthcare.com

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