#### FUNDAMENTALLY DIGITAL

# GR40CW



## **GR40CW**

#### Control Interface Box (CIB)\*

Dimension (W x D x H)	3.9 x 2.2 x 1.1 inch <sup>3</sup>
Weight	Approx. 0.3 lb

<sup>\*</sup> Optional

#### Power Supply Unit \*

	Power supply box	Adaptor	
Dimension (W x D x H)	8.2 x 6.1 x 2.6 inch <sup>3</sup>	2.7 x 6.1 x 1.3 inch <sup>3</sup>	
Weight	Typ. 2.6 lb	Typ. 1.2 lb	

<sup>\*</sup> Depending on the country, it can be provided with "a power supply box and a cable" or "an adapter and a gender cable".

#### **Battery Recharger**

Detector model	S4335-AW/AWM, S4343-AW/AWM, F4335-AW, F4343-AW
Dimension (W x D x H)	11.3 x 5.8 x 1.0 inch <sup>3</sup>
Weight	Typ. 0.7 lb

#### **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".

2

# GR40CW

#### Workstation

Hardware	
- CPU	Intel Core i3
- RAM	8 GB
- Storage	SSD 1 TB - Image storage capacity F4543-AW / S4343-AW / S4343-AWM : ~ 12,000 images F4335-AW / S4335-AW / S4335-AWM : ~ 14,000 images - Hard drive encryption
- Operating System	Microsoft Windows 7 or later
- Monitor	FHD 23.8" LCD Monitor (1920 × 1080)
Software	
- Image acquisition times* (X-ray exposure to image)	F4343-AW / S4343-AW / S4343-AWM (Tethered) : Preview < 2 sec, Final < 5 sec F4343-AW / S4343-AWM (Wireless) : Preview < 2 sec, Final < 6 sec F4335-AW / S4335-AWM / S4335-AWM (Tethered) : Preview < 2 sec, Final < 4 sec F4335-AW / S4335-AW / S4335-AWM (Wireless) : Preview < 2 sec, Final < 5 sec
- Post processing	S-Vue <sup>™</sup> - Protocol (Body part) adaptive multi scale image processing - Advanced noise reduction processing - Excess contrast reduction processing for minimizing metal artifact
- 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, Full Screen View)
- Auto cropping	Auto shutter
- Multi-language (Workstation Only)	English, French, German, Italian, Spanish, Russian, Simplified Chinese, Portuguese, Turkish, Finnish, Swedish, Czech, Polish

 $<sup>\</sup>ensuremath{^{\star}}$  It depends on the image processing parameters and wireless condition.

## GC85A

#### **AccE Glass-Free Detector**

Wireless Portable Detector	
Detector model	F4335-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions (L x W x H)	18.1 x 15.1 x 0.6 inch
Active detector matrix (Effective pixel matrix)	3,040 × 2,466 pixels
Effective area	16.8 × 13.6 inch
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. 4.4 lb (w/o Battery Set*), Approx. 4.9 lb (w/ Battery Set*)
Max. load capacity	881.8 lb for uniform load, 440.9 lb for local load (40 mm in diameter disk at the center)
Dust/Water-resistance	IP57
Self diagnosis	Automatic detection & correction of line artifact
Shock logging <sup>†</sup>	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

 $<sup>\</sup>ensuremath{^{\star}}$  The Battery Set includes the battery and the battery cover.

<sup>†</sup> Only shock logging data from F4335-AW, F4343-AW, S4335-AW and S4343-AW detectors is compatible with SMART Center.

Wireless Portable Detector	
Detector model	F4343-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions (L x W x H)	18.1 x 18.1 x 0.6 inch
Active detector matrix (Effective pixel matrix)	3,040 × 3,036 pixels
Effective area	16.8 × 16.7 inch
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. 5.5 lb (w/o Battery Set*), Approx. 6 lb (w/ Battery Set*)
Max. load capacity	881.8 lb for uniform load 440.9 lb for local load (40 mm in diameter disk at the center)
Dust/Water-resistance	IP57
Self diagnosis	Automatic detection & correction 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

<sup>\*</sup> The Battery Set includes the battery and the battery cover.

<sup>†</sup> Only shock logging data from F4335-AW, F4343-AW, S4335-AW and S4343-AW detectors is compatible with SMART Center.

# GC85A

#### **AccE Detector**

Wireless Portable Detector	
Detector model	S4335-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions (L x W x H)	18.1 x 15.1 x 0.6 inch
Active detector matrix (Effective pixel matrix)	3,040 × 2,466 pixels
Effective area	16.8 × 13.6 inch
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. 6.1 lb (w/o Battery Set*), Approx. 6.6 lb (w/ Battery Set*)
Max. load capacity	881.8 lb for uniform load 440.9 lb for local load (40 mm in diameter disk at the center) > 440.9 lb @ 3-point bending condition
Dust/Water-resistance	IP57
Self diagnosis	Automatic detection & correction 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

 $<sup>\</sup>ensuremath{^{\star}}$  The Battery Set includes the battery and the battery cover.

<sup>†</sup> Only shock logging data from F4335-AW, F4343-AW, S4335-AW and S4343-AW detectors is compatible with SMART Center.

Wireless Portable Detector	
Detector model	S4343-AW
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions (L x W x H)	18.1 x 18.1 x 0.6 inch
Active detector matrix (Effective pixel matrix)	3,040 × 3,036 pixels
Effective area	16.8 × 16.7 inch
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. 7.4 lb (w/o Battery Set*), Approx. 7.9 lb (w/ Battery Set*)
Max. load capacity	881.8 lb for uniform load 440.9 lb for local load (40 mm in diameter disk at the center) > 440.9 lb @ 3-point bending condition
Dust/Water-resistance	IP57
Self diagnosis	Automatic detection & correction 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

 $<sup>\</sup>ensuremath{^{\star}}$  The Battery Set includes the battery and the battery cover.

<sup>†</sup> Only shock logging data from F4335-AW, F4343-AW, S4335-AW and S4343-AW detectors is compatible with SMART Center.

# GC85A

#### **AccE Standard Detector**

Wireless Portable Detector	
Detector model	S4335-AWM
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions (L x W x H)	18.1 x 15.1 x 0.6 inch
Active detector matrix (Effective pixel matrix)	3,040 × 2,466 pixels
Effective area	16.8 x 13.6 inch
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. 6.5 lb (w/o Battery Set*), Approx. 7.1 lb (w/ Battery Set*)
Max. load capacity	881.8 lb for uniform load 440.9 lb for local load (40 mm in diameter disk at the center) > 440.9 lb @ 3-point bending condition
Dust/Water-resistance	IP57
Self diagnosis	Automatic detection & correction of line artifact
Shock logging	Real-time detection, logging and pop-up alarming
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

 $<sup>\</sup>ensuremath{^{\star}}$  The Battery Set includes the battery and the battery cover.

Wireless Portable Detector	
Detector model	S4343-AWM
Detector type	Amorphous Silicon TFT / Cesium Iodide scintillator (CsI)
Dimensions (L x W x H)	18.1 x 18.1 x 0.6 inch
Active detector matrix (Effective pixel matrix)	3,040 × 3,036 pixels
Effective area	16.8 x 16.7 inch
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. 7.4 lb (w/o Battery Set*), Approx. 7.9 lb (w/ Battery Set*)
Max. load capacity	881.8 lb for uniform load 440.9 lb for local load (40 mm in diameter disk at the center) > 440.9 lb @ 3-point bending condition
Dust/Water-resistance	IP57
Self diagnosis	Automatic detection & correction of line artifact
Shock logging	Real-time detection, logging and pop-up alarming
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

 $<sup>\</sup>ensuremath{^{\star}}$  The Battery Set includes the battery and the battery cover.

# **GR40CW**

#### S/W Optional Items

	Description
SimGrid <sup>TM</sup>	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
Mirror View	Provide secured screen sharing of S-Station to the display device using Wi-Fi CERTIFIED Miracast
Manual Stitching	Allow manual stitching of multiple images
S-Share <sup>TM 1</sup>	Sharing detectors between GR40CW and Samsung DR system
Value-up Package	Image Auto Rotation <sup>2</sup> / Additional Patient Information / Bariatric Exposure Management / Easy Protocol Management / Smart Crop Management / Trauma Exam
H/W DAP Activation	Allow compatibility with hardware DAP for recording dose information
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)

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

<sup>2)</sup> Image Auto Rotation supports Chest/Abdomen/Pelvis/Infantogram/Extremity protocols.

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, medical equipment, network systems, semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at news.samsung.com.

For more information about GR40CW, visit

www.samsunghealthcare.com

GR40CW Datasheet v5.2-250609-EN 1-DR-152 Rev 01

