EVS3643

Data Sheet

1. Specifications and Performances

• Panel & Electronics

Item	Unit	Detail
Model	-	EVS 3643 / EVS 3643G
Purpose	-	General Radiography
2D Matrix Array	-	a-Si TFT array
Scintillator	-	Directly Deposited CsI (Cesium Iodide) Gadox (Gadolinium Oxysulfide)
Energy Range	kVp	40 - 150
Typical Dynamic Range	µGy	50
Active Area	mm	358 x 430 mm
Pixel Pitch	µm	140
Resolution	pixel	2560 (W) × 3072 (L)
A/D Conversion	Bits	14
Input Voltage	Volt	DC +12V, 2A MAX.
Power Consumption	Watt	8W (Max)
Rated Power Supply (Wireless / Wired)	Watt	Wireless : 14W by using WPCS Wired : 24W by using tether interface cable with SSU or plate adaptor

• Performance

Item	Unit	Detail	
Typical DQE	%	EVS 3643	≥ 45%@ 0.5lp/mm
		EVS 3643G	≥ 25%@ 0.5lp/mm
Typical MTF	%	EVS 3643	≥ 35% @ 2lp/mm
		EVS 3643G	≥ 30% @ 2lp/mm (※ Truview ART applied)
Cycle time	Sec	≤ 8.5 sec. (※ EWT(X-ray window time) at 0.5sec.)	
X-ray Window	Sec	≤ 60 sec.	
Preview Time	Sec	≤ 2 sec. (※ EWT at 0.5sec.)	
Frame Rate	-	1frame (Static mode)	
Data Output/Interface	-	Gigabit Ethernet	

- Mechanical

Item	Unit	Detail
Overall Dimension [±0.5 mm]	mm	386 (W) × 460 (L) × 14.5 (D)
Weight	kg	2.98

2. System Configuration

The EVS 3643 detector is used in system configuration as illustrated below.

Components	Functions	Note
Flat Panel Detector EVS 3643 / EVS 3643G	Imaging device with Gigabit Ethernet signal interface to the operating PC	
System Synchronization Unit (SSU) EVS SSU	• A connecting device which receives power from an external input main and supplies power to the panel via a POE cable. (Optional) • It transfers images to the operating PC via Gigabit Ethernet cable. • When using in Sync. Trigger Mode, it synchronize the detector and generator.	
Battery Charger EVS BCS	A device to charge a battery pack. Possible to charge two battery packs simultaneously.	
Battery Pack EVS MBP	A device to supply power to the detector in Wireless Mode	
Wireless Charging System EVS WPCS	A device to wirelessly charge a battery pack that is attached to the detector (Optional)	Tx Device, WPCS Cradle
Access Point **(TP Link AC1750)**	A device to connect the detector with PC when using wireless network mode	
USB SW Box Set EVS USB01	A device to synchronize the detector and generator in USB Hand Switch Mode (Optional)	USB SW Box Hand Switch USB Cable (1m) X-ray Cable (3m)
Plate Adaptor	A device to supply power to a Battery Charger or the detector	
LAN Card	A device to allow the communication between SSU / detector and PC	
Cables	① Tether Interface Cable (3m) ② Extension Tether Cable (7m) (Optional) ③ Functional Cable (0.5m) ④ AC Power Cable (2m)	

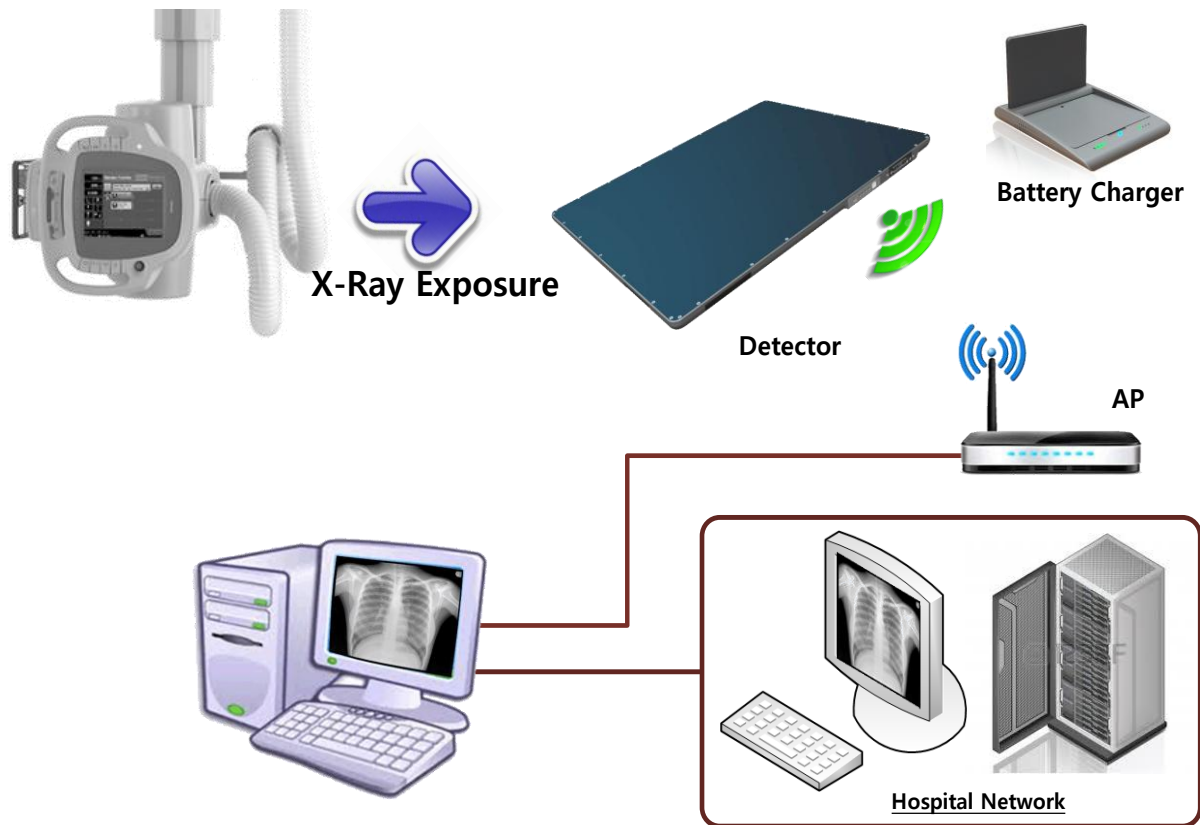|	⑤ LAN Cable (15m)	
	⑥ Generator Interface Cable (15m) (Optional)	
	⑦ Generator Extension Cable (0.5m) (Optional)	
CD Econsole, Ecali	• Interface software (Econsole1 or Other UI SW) • Viewer software supports image acquisition, pre-view, calibration, and image correction. • It can also support interface communications.	• Document : User Manual (PDF) • Calibration Data : MAP, PMP, GMP • Software : Econsole1, Ecali1
License Dongle Key	Needed to activate Econsole1	

3. Product Configuration List

Part name	Remark
Flat panel detector	EVS 3643(Scintillator : CsI : Tl) 2.74 kg
	EVS 3643G(Scintillator : Gadox) 2.74 kg
Battery charger	EVS-BCS : 0.5 kg
Battery pack	EVS-MBP : 0.24 kg
Wireless Charging System	EVS-WPCS : 0.15 kg
CD (Software / Calibration)	Document : User 's Manual (PDF) Calibration Data : MAP, PMP, GMP Software : Econsole1, Ecali1
User's Manual	Supported in all Modes
License Dongle Key (USB)	Needed for activating Econsole1

Tether Interface Cable (3m)	Supported in all Modes
Extension Tether Cable (7m)	Supported in all Modes
LAN Cable (15m)	Supported in all Modes
AC Power Cable (2m)	Supported in all Modes
System synchronization unit (SSU)	EVS-SSU01 : 2.3 kg

4. System set-up diagram

The EVS 3643 detector is used in system configuration as illustrated below.

X-Ray Exposure

Detector

Battery Charger

AP

Hospital Network

5. Storage Requirements

- Be sure to use and store the equipment under the conditions described below.

	Operation	Storage	Transit
Temperature	10 to 35℃	-15 to 55℃	-15 to 55℃
Humidity	30 to 85% RH (Without Condensing)	10 to 90% RH (Without Condensing)	10 to 90% RH (Without Condensing)
Atmospheric pressure	700 to 1060 hPa	500 to 1060 hPa	500 to 1060 hPa

- Do not expose the equipment to high temperatures and/or high humidity. This may cause the product to mulfunction.
- When not in use, keep the detector, handle unit, and grid in a designated location or in a location where they are safe and cannot fall down.