

SHIMADZU

# PRODUCT DATA

General  
Radiographic  
System

## RADspeed Pro

style edition

## CXDI



### GENERAL

RADspeed Pro DR package is a digital radiographic system that provides a comfortable examination environment for operator and patient alike.

This package includes the Flat Panel Detector (FPD). FPD provides high definition images.

### GENERAL

The Auto-stitching long view radiography can be performed. (Optional feature)

The TM and ® symbols are omitted in this manual.

## FEATURES

### (1) **System layout**

This system combines the CANON CXDI digital radiograph with an X-ray high voltage generator, X-ray tube assembly, collimator, X-ray tube support, and if necessary, X-ray radiography table and/or X-ray radiography stand.

The abundant combination of system components allows a variety of system configurations according to the intended applications.

### (2) **Enhancement of tracking units**

The enhanced tracking units such as for tracking with radiography conditions and positioning as well as the auto-positioning function help the operator save time and labor required for preparation for radiography while making the patient feel more relaxed during care. (Availability of these functions may vary depending on the options provided.)

### (3) **Network connectivity for an optimal workflow**

The system supports DICOM3.0 image format for diagnostic workstations and image transfer function.

### (4) **Long View Radiography Function (option)**

This option allows for generating a long view radiographic image by taking X-rays of continuous body parts, with the FPD position and the exposure field being interlocked.

### (5) **Energy saving collimator with a bright irradiation field**

LED is adopted as the light source to indicate the irradiation field. This reduces power consumption and improves brightness levels and durability.

### (6) **Dose Management**

Prior to exposure, dose area product (DAP) is estimated based on the exposure parameter setting and exposure area, and estimated value is displayed on the console. After exposure, DAP value is recalculated based on actual exposure parameter and displayed.

### (7) **Scatter Correction (option)**

The Scatter Correction improves image contrast by subtracting the estimated scatter noise from original image. 10 levels are selectable based on amount of enhancement effect.

**SYSTEM CONFIGURATION**

The RADspeed Pro Auto package consists of DR system, X-ray high-voltage generator, X-ray tube assembly, collimator, and X-ray tube support and if necessary, X-ray radiography table and/or X-ray radiography stand.

**System configuration and accompanying documents**

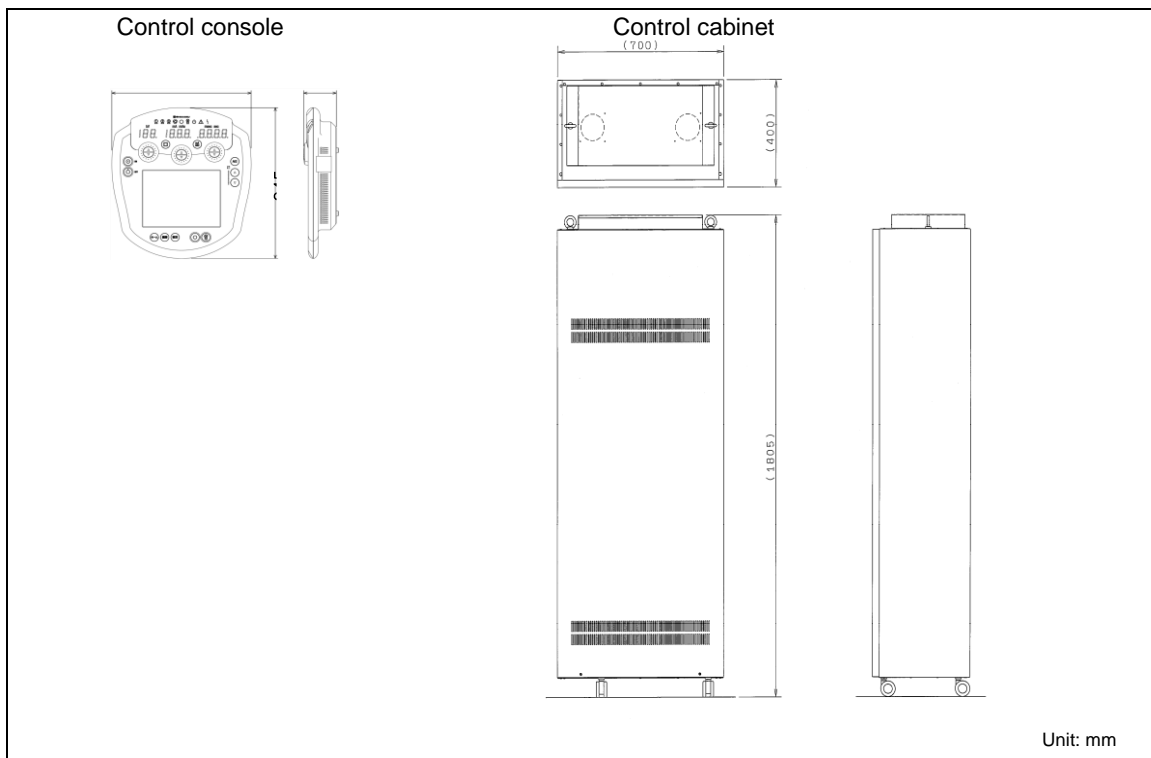
<b>Component</b>	<b>Model Name</b>
Whole system	RADspeed Pro (DR package)
X-ray high voltage generator.	UD150B-40/V-40/L-40
	UD150L-40E
X-ray tube assembly	0.3/0.8P324DK-85
	0.6/1.2P324DK-85, 0.6/1.2P324DK-125
	0.6/1.2P364DK-85, 0.6/1.2P364DK-125
	0.6/1.2P164DK-85
	0.3/0.8P323DK-85, 0.6/1.2P323DK-85
	0.6/1.2P38DE-85
	0.6/1.2P33DK-85
	0.6/1.2P18DE-85
	0.6/1.2P13DK-85
	1/2P38DK-85, 1/2P33D-85
	1/2P18DK-85, 1/2P13D-85
Ceiling suspended X-ray tube support	0.3/0.8P18DK-85
	CH-200
Floor mount X-ray tube support	CH-200M
	FH-20HR, FH-21HR
X-ray Bucky stand	BR-120T
	BR-120
	BR-120M
X-ray Bucky table	BK-200
	BK-120MK
	BK-12HK
X-ray Collimator	R-300
	R-20J
DR system	CXDI NE

**SPECIFICATIONS**

**X-Ray High Voltage Generator  
UD150B-40/V-40/L-40**

Item		Specifications	
Radiography technique		General radiography, Bucky radiography, Digital radiography	
Number of connectable X-ray tubes		2 tubes	
Setting range *1 *2*3	Radiography	Tube voltage	40 to 150kV
		Tube current	B-40 : 10 to 1,000mA V-40 : 10 to 800mA L-40 : 10 to 630mA
		mAs	0.5 to 800 mAs
		Time	0.001 to 10 sec
Nominal supply voltage (100Hz)		B-40/V-40 : 200/220/240/380/400/415/440/480VAC, 3-phase  L-40 : 200/220/240/380/400/415/440/480VAC, 3-phase or 200/220/240VAC, single-phase  Factor depending on the waveform: 1.00	
Power input		B-40/V-40 : 3-phase AC: 120kVA L-40 : 3-phase AC: 80kVA or single-phase AC: 95kVA	
Rated output		B-40 : 80kW (100kV, 800mA) V-40 : 65kW (100kV, 650mA) L-40 : 50kW (100kV, 500mA)  Product of tube voltage and max. current that can flow in 0.1s at 100kV tube voltage	
Short-time rating *2		B-40 : 150kV 500mA, 125kV 630mA, 100kV 800mA, 80kV 1000mA V-40 : 150kV 400mA, 125kV 500mA, 100kV 650mA, 80kV 800mA L-40 : 150kV 320mA, 125kV 400mA, 100kV 500mA, 80kV 630mA	
Nominal max. tube voltage and max. tube current that can flow at nominal max. tube voltage *2		B-40 : Short-time rating: 150kV 500mA Long-time rating: 125kV 12mA V-40 : Short-time rating: 150kV 400mA Long-time rating: 125 kV 9mA L-40 : Short-time rating: 150kV 320mA Long-time rating: 125kV 9mA	
Max. tube current and max. tube voltage to achieve max. tube current *2		B-40 : Short-time rating: 80kV 1000mA Long-time rating: 75kV 20mA V-40 : Short-time rating: 80kV 800mA Long-time rating: 125kV 9mA L-40 : Short-time rating: 80kV 630mA Long-time rating: 125kV 9mA	
Tube voltage and tube current combination for max. electrical output *2		B-40 : Short-time rating: 80kV 1000mA, 100kV 800mA Long-time rating: 75kV 20mA, 125kV 12mA V-40 : Short-time rating: 100kV 650mA Long-time rating: 125kV 9mA L-40 : Short-time rating: 80kV 630mA, 100kV 500mA Long-time rating: 125kV 9mA	
Dimensions	Operation panel	308(W) x 345(H) x 82(D)mm	
	Control cabinet	700(W) x 1805(H) x 400(D)mm	
Mass	Operation panel	2.5kg	
	Control cabinet	B-40/V-40 : 250kg L-40 : 240kg	

**DIMENSIONS**

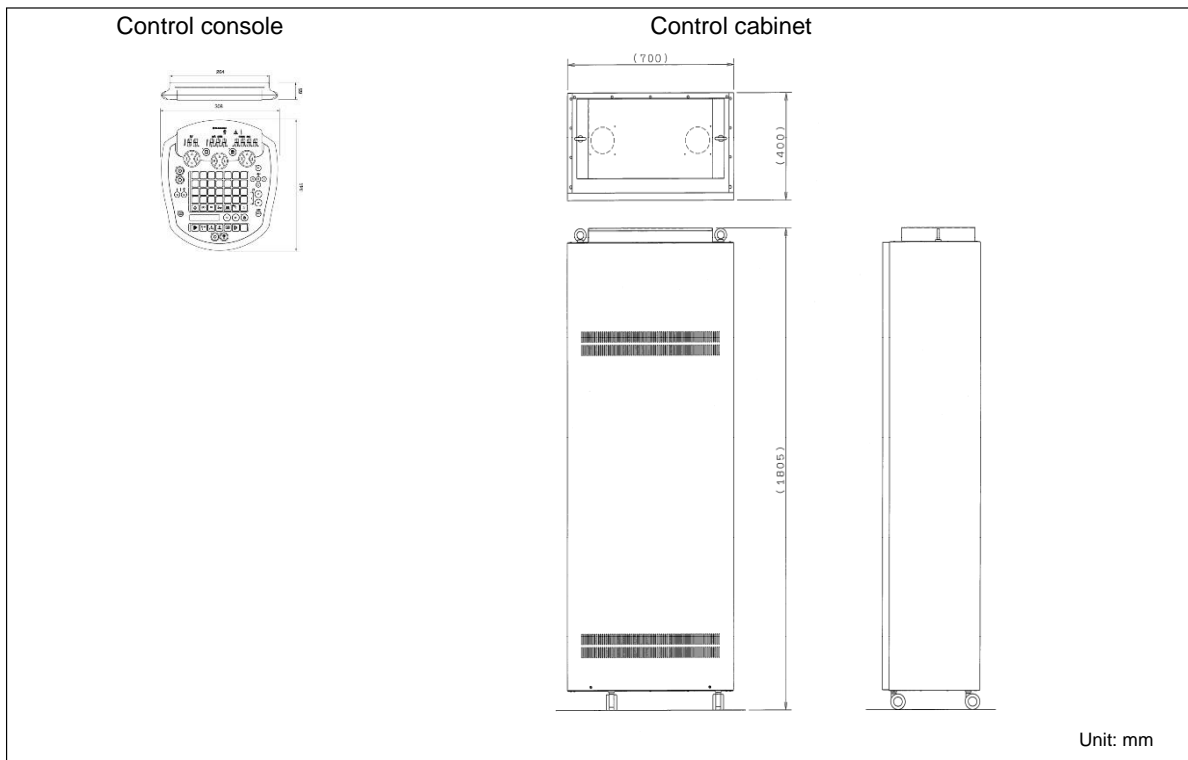


**UD150L-40E/L-40F**

Item		Specifications	
Radiography technique		General radiography, Bucky radiography, Digital radiography	
Number of connectable X-ray tubes		L-40F: 2 tubes L-40E: 1 tube	
Setting range *1 *2 *3	Radiography	Tube voltage	40 to 150kV
		Tube current	10 to 630mA
		mAs	0.5 to 800mAs
		Time	0.001 to 10sec
Nominal supply voltage (50/60Hz)		200/220/240/380/400/415/440/480VAC, 3-phase or 200/220/240VAC, single-phase Factor depending on the waveform: 1.00	
Power input		3-phase AC: 80kVA or Single-phase AC: 60kVA	
Rated output		3-phase AC: 50kW (100kV, 500mA) or Single-phase AC: 32kW (100kV, 320mA)  Product of tube voltage and max. current that can flow in 0.1s at 100kV tube voltage	
Short-time rating *2		3-phase AC: 150kV 320mA, 125kV 400mA, 100kV 500mA, 80kV 630mA or Single-phase AC: 150kV 200mA, 125kV 250mA, 100kV 320mA, 80kV 400mA, 60kV 500mA	
Nominal max. tube voltage and max. tube current that can flow at nominal max. tube voltage *2		Short-time rating: 3-phase AC: 150kV 320mA Single-phase AC: 150kV 200mA Long-time rating: 125kV 4mA	
Max. tube current and max. tube voltage to achieve max. tube current *2		Short-time rating: 3-phase AC: 80kV 630mA Single-phase AC: 60kV 500mA Long-time rating: 125kV 4mA	
Tube voltage and tube current		Short-time rating: 3-phase AC: 80kV 630mA, 100kV 500mA	

Item		Specifications
combination for max. electrical output *2		Single-phase AC: 80kV 400mA, 100kV 320mA Long-time rating: 125kV 4mA
Dimensions	Operation panel	308(W) x 345(H) x 65(D)mm
	Control cabinet	700(W) x 1805(H) x 400(D)mm
Mass	Operation panel	2kg
	Control cabinet	240kg

**DIMENSIONS**



- \*1: Setting range differs according to the X-ray tube type.
- \*2: Limited according to the X-ray tube type.
- \*3: The various conditions are as follows (conform to IEC-standards):  
 Tube voltage (within +/-10%), Tube current (within +/-20%)  
 mAs within +/- (10% + 0.2mAs), Time within +/- (10% + 1ms)

**Options**

Item	Specifications	
Direct phototimer (AEC) radiography option	Combination with a Shimadzu receiver permits phototimer(AEC) radiography. The following types can be used: Xe detector-type phototimer receiver (SPT-XD series) Number of pick up fields: 1/3/4(3 types) Permitted combination: up to three receivers	
B-40/V-40/L-40 Communication Unit	Permits communication of radiographic conditions with DR unit	
High Speed Rotation Starter SA-60	Power supply	Single phase 200V,208V,220V,230V,240V (for power and control circuits)
	Power consumption	7.5kVA
	Frequency	50/60Hz
	Supply capacity	5kVA
	Voltage validation	±10%
	Ground resistance	Less than 100ohm
	Dimensions	520(W) x 400(H) x 470(D)mm
Mass	50kg	

**X-Ray Tube Assembly  
0.3/0.8P324DK-85**

Item		Specifications
Nominal X-ray tube voltage	Long-time	125kV
	Short-time	150kV
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)
	Nominal continuous input power	470W (660HU/s) (with fan),
X-ray tube	Max. anode heat content	280kJ (400kHU)
	Max. anode heat dissipation rate	1600W (2200HU/s)
	Max. continuous heat dissipation rate	300W (420HU/s)
Nominal focal spot		0.3mm      0.8mm
Nominal anode input power (0.1sec, 180Hz)		11kW      54kW
Anode Target	Material	Rhenium-tungsten faced molybdenum
	Angle/diameter	12° / 100mm
Minimum total Filtration		1.7mm Al / 75kV (including added filter)
Permanent Filtration		1.0mm Al / 75kV
X-ray radiation field		350 x 350mm at SID 1m
Mass		21kg

**0.6/1.2P324DK-85 & 0.6/1.2P324DK-125**

Item		Specifications
Nominal X-ray tube voltage	Long-time	125kV
	Short-time	150kV
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)
	Nominal continuous input power	470W (660HU/s) (with fan)
X-ray tube	Max. anode heat content	280kJ (400kHU)
	Max. anode heat dissipation rate	1600W (2200HU/s)
	Max. continuous heat dissipation rate	300W (420HU/s)
Nominal focal spot		0.6mm      1.2mm
Nominal anode input power (0.1sec, 180Hz)		38kW      92kW
Anode Target	Material	Rhenium-tungsten faced molybdenum
	Angle/diameter	12° / 100mm
Minimum total Filtration		1.7mm Al / 75kV (including added filter)
Permanent Filtration		1.0mm Al / 75kV
X-ray radiation field		350 x 350mm at SID 1m
Mass		22.5kg

**0.6/1.2P164DK-85 & 0.6/1.2P364DK-85 & 0.6/1.2P364DK-125**

Item		Specifications
Nominal X-ray tube voltage	Long-time	125kV
	Short-time	150kV
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)
	Nominal continuous input power	470W (660HU/s) (with fan)
X-ray tube	Max. anode heat content	280kJ (400kHU)
	Max. anode heat dissipation rate	1600W (2200HU/s)
	Max. continuous heat dissipation rate	300W (420HU/s)
Nominal focal spot		0.6mm      1.2mm
Nominal anode input power (0.1sec)	50Hz (164DK)	12.7kW      34.3kW
	60Hz (164DK)	13.8kW      37.3kW
	180Hz (364DK)	24kW      65kW
Anode Target	Material	Rhenium-tungsten faced molybdenum
	Angle/diameter	16° / 100mm
Minimum total Filtration		1.7mm Al / 75kV (including added filter)
Permanent Filtration		1.0mm Al / 75kV
X-ray radiation field		350 x 350mm at SID 0.65m
Mass		22.5kg

**0.3/0.8P323DK-85**

Item		Specifications
Nominal X-ray tube voltage	Long-time	125kV
	Short-time	150kV
X-ray tube	Max. heat content	1100kJ (1600kHU)

Item		Specifications	
assembly	Nominal continuous input power	470W (660HU/s) (with fan),	
X-ray tube	Max. anode heat content	210kJ (300kHU)	
	Max. anode heat dissipation rate	1200W (1690HU/s)	
	Max. continuous heat dissipation rate	250W (350HU/s)	
Nominal focal spot		0.3mm	0.8mm
Nominal anode input power (0.1sec, 180Hz)		11kW	54kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	12° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 1m	
Mass		22.5kg	

**0.6/1.2P323DK-85**

Item		Specifications	
Nominal X-ray tube voltage	Long-time	125kV	
	Short-time	150kV	
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)	
	Nominal continuous input power	470W (660HU/s) (with fan),	
X-ray tube	Max. anode heat content	210kJ (300kHU)	
	Max. anode heat dissipation rate	1200W (1690HU/s)	
	Max. continuous heat dissipation rate	250W (350HU/s)	
Nominal focal spot		0.6mm	1.2mm
Nominal anode input power (0.1sec, 180Hz)		38kW	92kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	12° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 1m	
Mass		21kg	

**0.6/1.2P18DE-85 & 0.6/1.2P38DE-85**

Item		Specifications	
Nominal X-ray tube voltage	Long-time	125kV	
	Short-time	150kV	
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)	
	Nominal continuous input power	235W (330HU/s) (without fan)	
X-ray tube	Max. anode heat content	140kJ (200kHU)	
	Max. anode heat dissipation rate	640W (900HU/s)	
	Max. continuous heat dissipation rate	210W (300HU/s)	
Nominal focal spot		0.6mm	1.2mm
Nominal anode input power (0.1sec)	50Hz (18DE)	18kW	48kW
	60Hz (18DE)	21kW	53kW
	180Hz (38DE)	37kW	85kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	12° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 1m	
Mass		22.5kg	

**0.6/1.2P13DK-85 & 0.6/1.2P33DK-85**

Item		Specifications	
Nominal X-ray tube voltage	Long-time	125kV	
	Short-time	150kV	
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)	
	Nominal continuous input power	235W (330HU/s) (without fan)	
X-ray tube	Max. anode heat content	140kJ (200kHU)	
	Max. anode heat dissipation rate	640W (900HU/s)	
	Max. continuous heat dissipation rate	210W (300HU/s)	
Nominal focal spot		0.6mm	1.2mm



Item		Specifications	
Nominal anode input power (0.1sec)	50Hz (13DK)	12.5kW	34.5kW
	60Hz (13DK)	14kW	37.5W
	180Hz (33DK)	24kW	65kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	16° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 0.65m	
Mass		21kg	

**1/2P18DK-85 & 1/2P38D-85**

Item		Specifications	
Nominal X-ray tube voltage	Long-time	125kV	
	Short-time	150kV	
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)	
	Nominal continuous input power	235W (330HU/s) (without fan)	
X-ray tube	Max. anode heat content	140kJ (200kHU)	
	Max. anode heat dissipation rate	640W (900HU/s)	
	Max. continuous heat dissipation rate	210W (300HU/s)	
Nominal focal spot		1mm	2mm
Nominal anode input power (0.1sec)	50Hz (18DK)	35kW	68.5kW
	60Hz (18DK)	39kW	75kW
	180Hz (38D)	66.5kW	117.7kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	12° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 1m	
Mass		22kg: 18DK 21kg: 38D	

**1/2P13DK-85 & 1/2P33D-85**

Item		Specifications	
Nominal X-ray tube voltage	Long-time	125kV	
	Short-time	150kV	
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)	
	Nominal continuous input power	235W (330HU/s) (without fan)	
X-ray tube	Max. anode heat content	140kJ (200kHU)	
	Max. anode heat dissipation rate	640W (900HU/s)	
	Max. continuous heat dissipation rate	210W (300HU/s)	
Nominal focal spot		1mm	2mm
Nominal anode input power (0.1sec)	50Hz (13DK)	27.5kW	64kW
	60Hz (13DK)	30kW	70W
	180Hz (33D)	53kW	110kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	16° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 0.65m	
Mass		22.5kg	

**0.3/0.8P18DK-85**

Item		Specifications	
Nominal X-ray tube voltage	Long-time	125kV	
	Short-time	150kV	
X-ray tube assembly	Max. heat content	1100kJ (1600kHU)	
	Nominal continuous input power	235W (330HU/s) (without fan)	
X-ray tube	Max. anode heat content	140kJ (200kHU)	
	Max. anode heat dissipation rate	640W (900HU/s)	
	Max. continuous heat dissipation rate	210W (300HU/s)	
Nominal focal spot		0.3mm	0.8mm
Nominal anode input power	50Hz	6kW	28kW

Item		Specifications	
(0.1sec)	60Hz	6.4kW	31.2kW
Anode Target	Material	Rhenium-tungsten faced molybdenum	
	Angle/diameter	12° / 100mm	
Minimum total Filtration		1.7mm Al / 75kV (including added filter)	
Permanent Filtration		1.0mm Al / 75kV	
X-ray radiation field		350 x 350mm at SID 1m	
Mass		22.5kg	

**X-Ray Tube Support  
CH-200**

Item	Standard type	Rear-mounting type (*1)	Front mount L type (option)	Low-ceiling type (option)
<p>In case of Standard type <span style="float: right;">unit : mm</span></p>				
Maximum supportable weight	47kg			
Balancing system	Spring-balanced type			
Ceiling fixtures rail	Fixed rail: 4m / 5.5m Travelling rail: 2m / 2.6m / 3.3m			
Movement of X-ray tube assembly				
Range of movement Vertical travel	With ceiling height of 2,860mm: 400 to 2,000mm	With ceiling height of 2,860mm: 400 to 2,000mm	With ceiling height of 2,860mm: 320 to 1,920mm	With ceiling height of 2,710mm: 400 to 2,000mm
	Continuous			
Longitudinal travel	2,950 mm (with a 4m fixed rail) (*2) 4,450 mm (with a 5.5m fixed rail) (*2)			
Transverse travel	1,400mm (with a 2m travelling rail) 2,000mm (with a 2.6m travelling rail) 2,700mm (with a 3.3m travelling rail)			

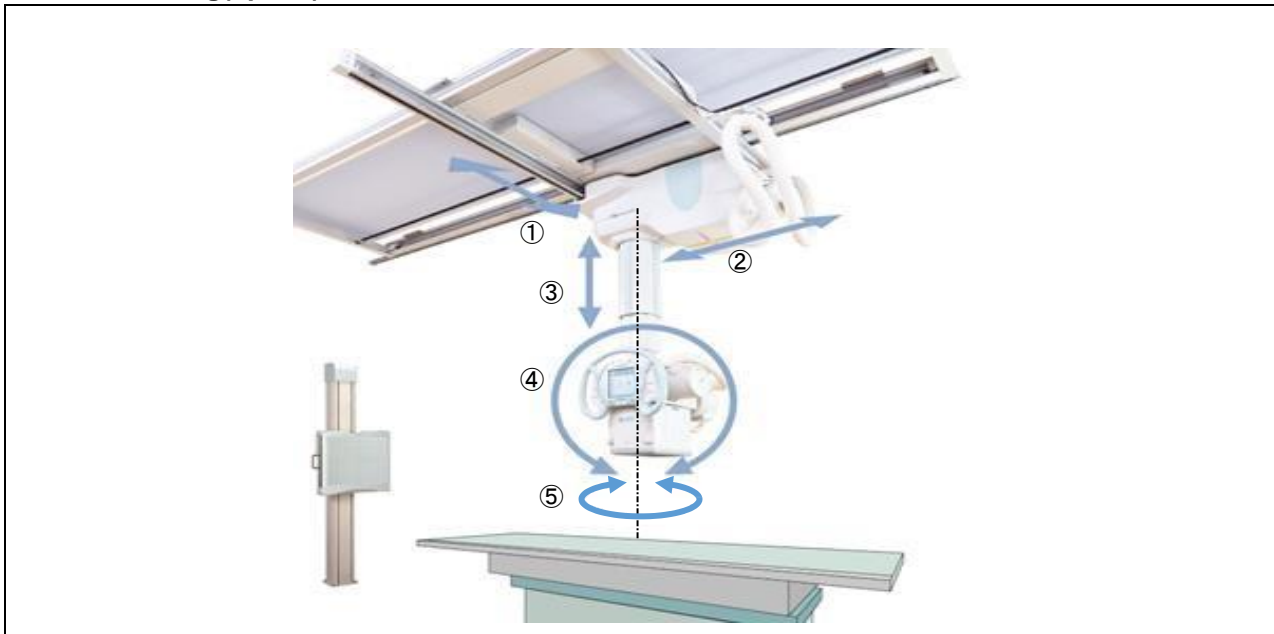
Item	Standard type	Rear-mounting type (*1)	Front mount L type (option)	Low-ceiling type (option)
Rotation about the vertical axis				
Angle of rotation	±180°, continuous (click stops at 90° intervals)		+30° to -90°, continuous (click stops at 90° intervals)	
Rotation about the horizontal axis				
Angle of rotation	+120° to -180°, continuous Click stops at 0° and ±90°			
Operation	Manual, electromagnetic lock (off lock)			
Display	Angle of rotation displayed digitally.			
Standard ceiling height	2,860mm (*3)		2,710mm	
Mass	250kg (including support, 4m fixed rail, and 2m traveling rail)			
Power source	Single phase, AC100V, 0.2kVA, 50/60Hz Single phase, AC 200, 220, 230, 240V, 1.0kVA, 50/60 Hz			

\*1 Low-ceiling type and electric tomography, bucky synchronization unit are not available with the rear-mounting type.

\*2 The traveling stroke decreases by 100mm in combination with the electronic tomography (optional) and the auto positioning function (optional).

\*3 It is possible to keep the vertical travel 400 to 2,000mm by installing the focal height 350mm lower, even when the ceiling height is 3,210 mm.

**Auto Positioning(option)**



Type	Standard type	Rear-mounting type	Front mount L type	Low-ceiling type
Enable / Disable	Enable	Disable	Enable	Enable

<b>Movement</b>	<ul style="list-style-type: none"> <li>① Transverse travel</li> <li>② Longitudinal travel</li> <li>③ Vertical Travel</li> <li>④ Tube Rotation</li> <li>⑤ Swivel(option)</li> <li>⑥ Irradiation Field Collimation</li>   <li>⑦ Bucky Tracking(When combined with BR-120, BR-120T or BK-200)</li> </ul>	
<b>Axis</b>	<b>Speed</b>	
Transverse travel	10cm/sec max.	
Longitudinal travel	15cm/sec max.	
Vertical travel	10cm/sec max.	
Tube rotation	20 degree sec max.	
Swivel(option)	20 degree sec max.	
Number of Memories	30 memories for Bucky Stand 30 memories for Bucky Table 30 memories for General radiodiography technique	

**Options**

Item	Description
Tractable cable management system	It is placed along the ceiling rails to supports smooth positioning.
Longitudinal or Lateral SID display	The display shows SID for bucky stand BR-120/120T.
Vertical tracking	X-ray tube will follow the vertical motion of BR-120/120T and or table height of the BK-200.
Bucky tracking	The bucky device of BK-200 will follow the axis of X-ray beam automatically.
Auto collimation	The irradiation field of the collimator can be adjusted automatically in accordance with the SID and cassette size detected by bucky devise of the table and/or stand.

**CH-200M**

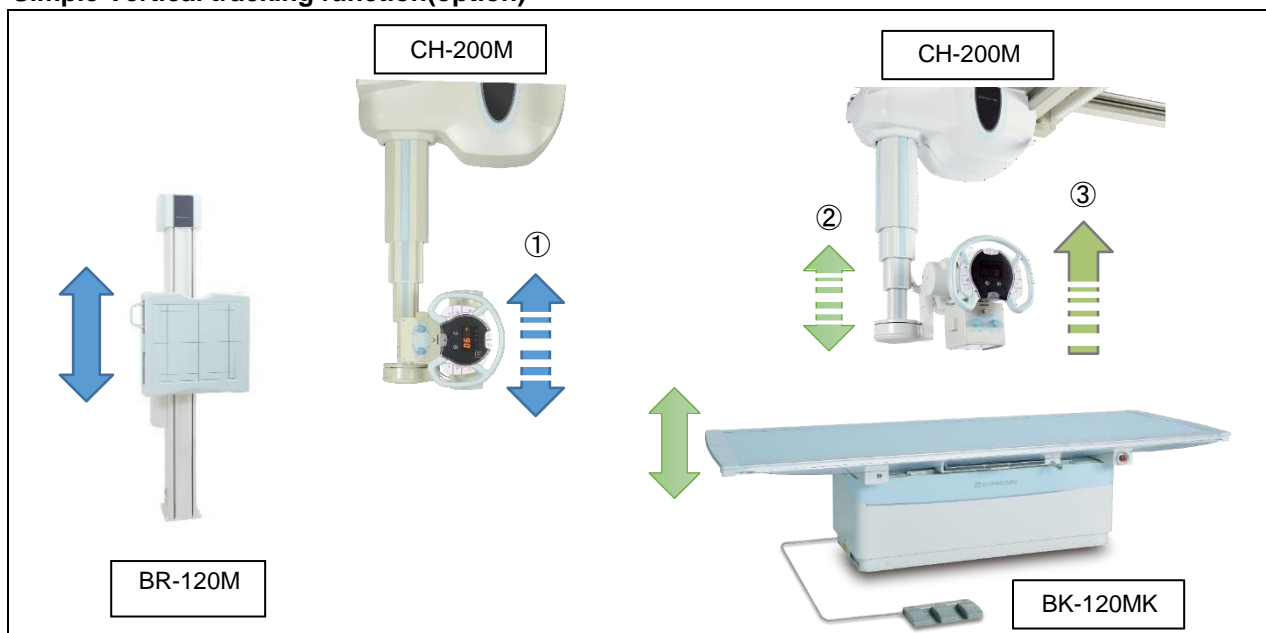
Item	Standard type	Rear-mounting type (*1)	Front mount L type (option)	Low-ceiling type (option)
<p>In case of Standard type <span style="float: right;">unit : mm</span></p>				
Maximum supportable weight	39kg			
Balancing system	Spring-balanced type			
Ceiling fixtures rail	Fixed rail: 4m / 5.5m Travelling rail: 2m / 2.6m / 3.3m			
Movement of X-ray tube assembly				
Range of movement Vertical travel (*1)	With ceiling height of 2,860mm: 400 to 2,000mm	With ceiling height of 2,860mm: 400 to 2,000mm	With ceiling height of 2,860mm: 320 to 1,920mm	With ceiling height of 2,710mm: 400 to 2,000mm
	Continuous			
Longitudinal travel	2,950mm (with a 4m fixed rail) 4,450mm (with a 5.5m fixed rail)			
Transverse travel	1,400mm (with a 2m travelling rail) 2,000mm (with a 2.6m travelling rail) 2,700mm (with a 3.3m travelling rail)			
Rotation about the vertical axis				
Angle of rotation	±180°, continuous (click stops at 90° intervals)			+30° to -90°, continuous (click stops at 90° intervals)
Rotation about the horizontal axis				
Angle of rotation	+120° to -180°, continuous Click stops at 0° and ±90°			
Operation	Manual, electromagnetic lock (off lock)			

Item	Standard type	Rear-mounting type (*1)	Front mount L type (option)	Low-ceiling type (option)
Display	Angle of rotation displayed digitally.			
Standard ceiling height	2,860mm (*3)		2,710mm	
Mass	250kg (including support, 4m fixed rail, and 2m traveling rail)			
Power source	Single phase, AC100V, 0.7kVA, 50/60Hz			

\*1 Low-ceiling type are not available with the rear-mounting design.

\*2 It is possible to keep the vertical travel 400 to 2,000mm by installing the focal height 350mm lower, even when the ceiling height is 3,210 mm.

**Simple Vertical tracking function(option)**

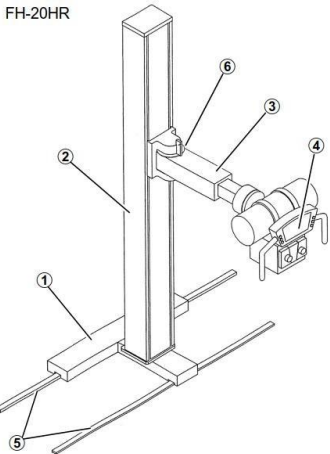
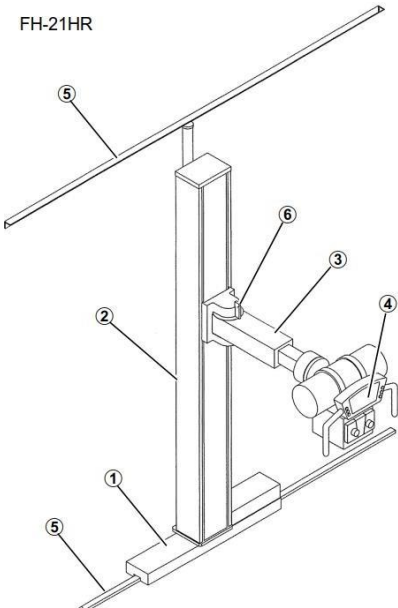

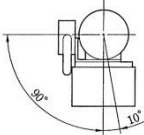
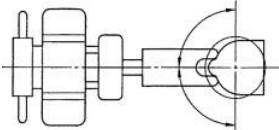


Type	Standard type	Rear-mounting type	Front mount L type	Low-ceiling type
<b>Enable / Disable</b>	Enable	Enable	Enable	Enable
<b>Movement</b>	① Vertical Tracking with BR-120M *) When tube rotation is +90° or -90°. **) To keep upper edge of irradiation field and film/CR (BR-120M(CE)) ***) To keep center of X-ray beam and film/CR (BR-120M(UL)) ② Vertical Tracking with BK-120MK *) When tube rotation is 0 degree. **) To keep preset SID (The downward direction is deadman method using a switch on the CH panel). ③ Auto retract function			
<b>Axis</b>	<b>Speed</b>			
<b>Vertical travel</b>	10cm/sec max.			

**Options**

Item	Description
Vertical SID display	The display shows SID with vertical travel toward BK-120MK.
Longitudinal or Lateral SID display	The display shows SID for bucky stand BR-120M.
Tractable cable management system	It is placed along the ceiling rails to supports smooth positioning.

**FH-20HR/21HR**

Item	Specifications
 <p>FH-20HR</p> <p>① Base ② Column ③ Arm ④ Control Panel ⑤ Guide rail ⑥ Rotation lock/release lever</p>	 <p>FH-21HR</p> <p>③ Arm ⑥ Rotation lock/release lever</p>
Maximum supportable weight	35kg
Balancing system	Counter weight-balanced type
Vertical travel	400 – 1950mm (floor to focus)
Longitudinal travel	2,500mm
Transverse travel	250mm
Rotation around horizontal axis 	±180°, continuous (click stops at 90° intervals)
Rotation of X-ray tube unit (longer axis) 	90° upward 10° downward continuously variable
Rotation around vertical axis 	stop at three points -90°, 0°, +90°
Operation	Manual, electromagnetic lock(off lock)
Ceiling height	FH-20HR : 2,300mm FH-21HR : 2350 – 2900mm

Item	Specifications
Required space for installation	Refer to BK series
Mass	140kg (excluding X-ray tube assembly and collimator)
Power source	Single phase, AC100V, 0.3kVA, 50/60Hz

**Collimator  
R-300**

Item	Specifications	
Max. voltage used for applicable X-ray tube	150kV	
Radiation field	Shape	Rectangular
	Maximum field	52.3 x 52.3cm @SID 100cm
	Minimum field	0 x 0cm
Radiation field indication	Average brightness	160lx @SID 100cm
	Accuracy	Less than 2% of SID
	Center of the field	Dark hair cross
	Light source	LED
	Period of indication	30sec (timer-controlled)
Opening indication	SID	1, 1.5, 1.8, 2m
	Field size indication	Digital indication
Lead equivalent of leaves	Shielding leaves (H and V-leaves)	3mm Pb eq.
	Middle leaves	2mm Pb eq.
Filtration	Inherent filtration	1.1 mm Al eq.
	Auto-filter	None / 0.1mm Cu / 0.2mm Cu / 0.3mmCu  It automatically selects the X-ray filter in accordance with the radiography conditions set with the X-ray high-voltage generator.
Turning mechanism	+/- 45°	
External dimensions	231(W) x 317(D) x 259(H)mm	
Mass	10kg	
Power supply	24VDC, 150VA	

**Options**

Item	Description
Line marker	Used to align the center positions of the Bucky device and the equipment, and to set the radiography position for long view radiography
Detent	Fitted at the home position of the turning mechanism and serves to confirm the home position when the collimator is turned.
DAP adapter for VACUTEC	This is a mounting adapter for ionization chamber manufactured by VACUTEC. DAP can be displayed on the console of the high-voltage generator. It also can be embedded in DICOM tag.
DAP adapter for PTW	This is a mounting adapter for ionization chamber manufactured by PTW.

**R-20J**

Item	Specifications	
Max. voltage used for applicable X-ray tube	150kV	
Radiation field	Shape	Rectangular
	Maximum field	43 x 43cm @SID 100cm
	Minimum field	0 x 0cm
Radiation field indication	Average brightness	160lx @SID 100cm
	Accuracy	Less than 2% of SID
	Center of the field	Dark hair cross
	Light source	LED
	Period of indication	30 sec (timer-controlled)



Item		Specifications
Opening indication	SID	1, 1.5, 2m
	Field size indication	20,23,25,28,30,36,43cm 8,9,10,11,12,14,17inch
Drive of leaves		Manual
Lead equivalent of leaves	Shielding leaves (H and V-leaves)	3mm Pb eq.
	Middle leaves	2mm Pb eq.
Filtration	Inherent filtration	1.0 mm Al eq.
	Additional filter	0.5mm Al. plate
Turning mechanism		+/- 45°
External dimensions		205(W) x 273(D) x 222(H)mm
Mass		6kg
Power supply		AC 12V : 50/60Hz : 100VA or DC24V 100VA

**Options**

Item	Description
Line marker	Used to align the center positions of the Bucky device and the equipment, and to set the radiography position for long view radiography
Detent	Fitted at the home position of the turning mechanism and serves to confirm the home position when the collimator is turned.
DAP adapter for VACUTEC	This is an adapter kit for DAP meter manufactured by VACUTEC. DAP can be displayed on the console of DAP meter.

**X-ray Radiography Table  
BK-200**

Item	Specifications	
<ul style="list-style-type: none"> <li>① Main Body</li> <li>② Floating Table Top Assembly</li> <li>③ Bucky device</li> <li>④ Control cabinet</li> <li>⑤ Compression belt (optional)</li> <li>⑥ Lateral cassette holder (optional)</li> <li>⑦ Grip switch (optional)</li> <li>⑧ CFRP table top (optional, not shown)</li> <li>⑨ Handle (optional, not shown)</li> <li>⑩ Drip holder (optional, not shown)</li> <li>⑪ Rear foot switch (optional, not shown)</li> <li>⑫ Grid release button</li> </ul>	<p style="text-align: right;">unit:mm</p>	
Main Body	Size of Tabletop	810(Width) x 2,350(Length)mm Flat tabletop
	Material of tabletop	Wood CFRP(option)
	Attenuation equivalent for table	0.7mmAl. eq. (CFRP)
	Longitudinal movement	1,150mm Manual operation
	Lateral movement	+/- 150mm Manual operation
	Tabletop Lock	Electromagnetic lock (off-lock)
	Vertical moving range	375mm Motor drive
	Distance between tabletop and floor	535 - 850mm (The tabletop stops once at Approx. 700mm.) *1
	Distance between tabletop and X-ray conversion Layer	80mm
	Maximum allowable load	350kgf
Bucky Device	Portable FPD fixing position	Center position
	Bucky device moving stroke	400mm (+/- 200)
	X-ray grid (Fixed grid)	Dimensions
Intermediate material		Al

Item		Specifications	
		Density, ratio Note) Select one of the listed Grids	40 lines/cm, 10:1 52 lines/cm, 8:1
		Mounting/removing grid	Possible
Installation Conditions	Required space for installation	5,000(W) x 3,500(L)mm (to combine with the X-ray support device)	
	Mass	320kg	
	Power Supply	Single-phase AC200, 220, 230, 240V 1.4kVA, 50/60Hz	

\*1 When installing, the stop position can be adjusted within a height range of 600 to 700mm.

**Options**

Item	Description
Compression belt	This belt to be attached to the sides of the tabletop secures the patient's radiography region to the tabletop.
Lateral cassette holder	This holder to be attached to the side of the tabletop holds a cassette in lateral radiography.
Grip switch	This switch to be attached to the side of the tabletop operates the floating tabletop.
CFRP tabletop	This tabletop is made of CFRP (Carbon Fiber Reinforced Plastic).
Table elevation Tracking device	Adds the following functions when combined with the X-ray tube support CH-200. <ul style="list-style-type: none"> <li>The height of the X-ray tube support CH-200 is adjusted in conjunction with the height of the tabletop to maintain a constant exposure distance.</li> <li>The size of irradiation field is automatically adjusted.</li> </ul>
Bucky tracking device	Incorporated into the tabletop elevator, this unit drives the Bucky device electrically. When this option is selected, Bucky tracking radiography is available if the X-ray tube support CH-200 is combined.
Hand grip	Equipped with tabletop side and grasped by patient so that the patient position keeps steady.
Drip stand	Attached to the tabletop side and suspends the drip bins.
Rear side foot switch	Additional rear side foot switch which has the same function and shape than a front one.
FPD rotation tray	The FPD tray can be rotated 90 degree to change the orientation of FPD. (Portrait↔Landscape) This option is only for 14 x 17 inch (35 x 43 cm) FPD.

**BK-120MK**

Item	Specifications		
<p>① Main Body                      ② Floating Table Top Assembly                      ③ Bucky device                      ④ Grid indicator                      ⑤ Transformer unit</p> <p>Optional Items                      ⑥ Compression belt                      ⑦ Lateral cassette holder                      ⑧ Grip switch                      ⑨ Drip holder (not shown)                      ⑩ CFRP table top (not shown)</p>	<p style="text-align: right;">unit:mm</p>		
Main Body	Size of Tabletop	810(Width) x 2,350(Length)mm	
	Material of tabletop	Wood CFRP(option)	
	Attenuation equivalent for table	1.7mmAl. eq. (Wood) 0.7mmAl. eq. (CFRP)	
	Longitudinal movement	1,100mm Manual operation	
	Lateral movement	+/- 125mm Manual operation	
	Tabletop Lock	Electromagnetic lock (off-lock)	
	Vertical moving range	315mm Motor drive	
	Distance between tabletop and floor	535 to 850mm (The tabletop stops once at Approx. 700mm.) *1	
	Distance between tabletop and X-ray conversion Layer	73mm	
	Maximum allowable load	200kgf	
Bucky Device	Portable FPD fixing position	Center position	
	Bucky device moving stroke	380mm (+/- 190)	
	X-ray grid (Fixed grid)	Dimensions	438mm x 479mm
		Intermediate material	Al

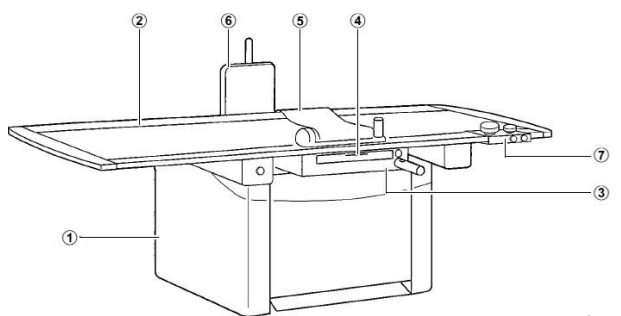
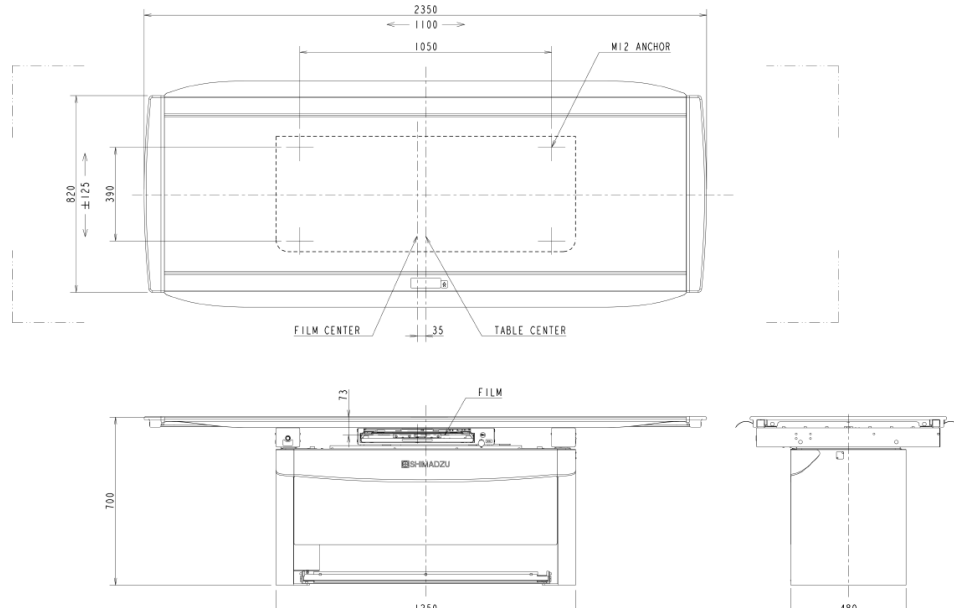
Item		Specifications	
		Density, ratio Note) Select one of the listed Grids	40 lines/cm, 10:1 52 lines/cm, 8:1
		Mounting/removing grid	Possible
Installation Conditions	Required space for installation	5,000(W) x 3,500(L)mm (to combine with the X-ray support device)	
	Mass	320kg	
	Power Supply	Single-phase AC200, 220, 230, 240V 1.0kVA, 50/60Hz	

\*1 When installing, the stop position can be adjusted within a height range of 600 to 700mm.

**Options**

Item	Description
Compression belt	This belt to be attached to the sides of the tabletop secures the patient's radiography region to the tabletop
Lateral cassette holder	This holder to be attached to the side of the tabletop holds a cassette in lateral radiography.
Grip switch	This switch to be attached to the side of the tabletop operates the floating tabletop.
CFRP tabletop	This tabletop is made of CFRP (Carbon Fiber Reinforced Plastic).
Hand grip	Equipped with tabletop side and grasped by patient so that the patient position keeps steady.
Drip stand	Attached to the tabletop side and suspends the drip bins.
FPD rotation tray	The FPD tray can be rotated 90 degree to change the orientation of FPD. (Portrait ↔ Landscape) This option is only for 14 x 17 inch (35 x 43 cm) FPD.

**BK-12HK**

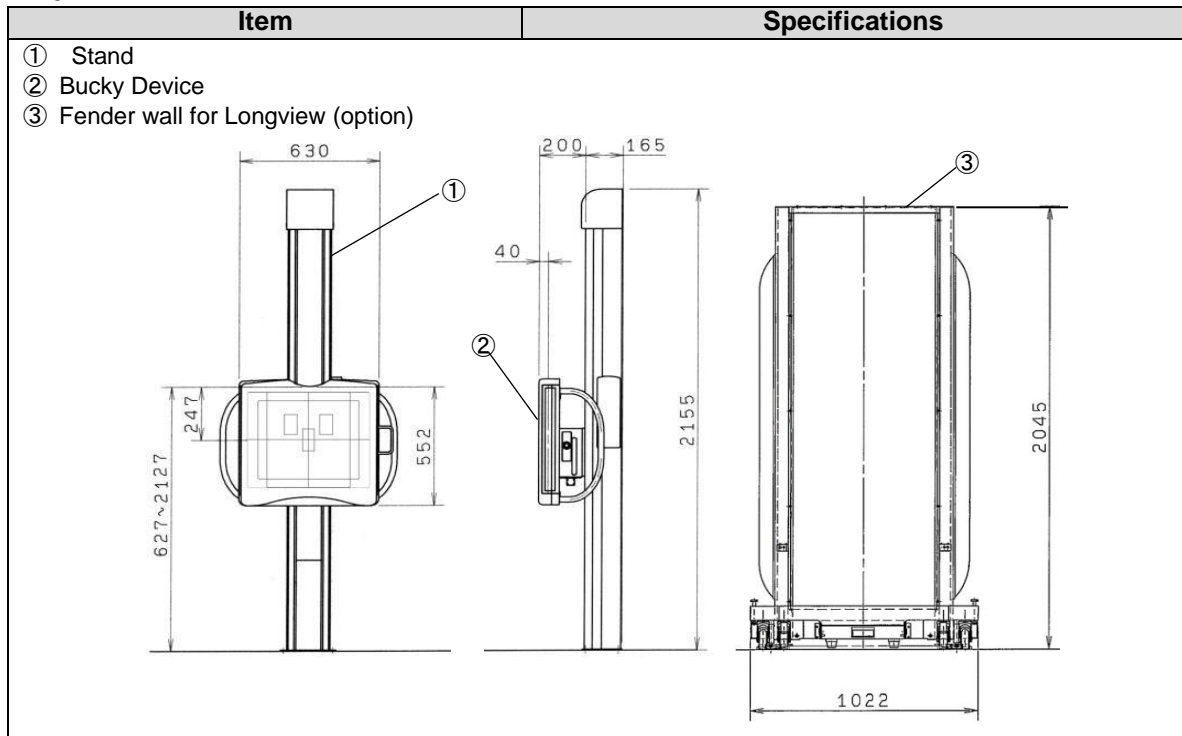
Item	Specifications
<ul style="list-style-type: none"> <li>① Main Body</li> <li>② Floating Table Top Assembly</li> <li>③ Bucky device</li> <li>④ Grid indicator</li> </ul> <p>Optional Items</p> <ul style="list-style-type: none"> <li>⑤ Compression belt</li> <li>⑥ Lateral cassette holder</li> <li>⑦ Grip switch</li> <li>⑧ Drip holder (not shown)</li> <li>⑨ CFRP table top (not shown)</li> </ul>	 <p style="text-align: right;">unit:mm</p> 

Item		Specifications		
Main Body	Size of Tabletop	810(Width) x 2,350(Length)mm		
	Material of tabletop	Wood CFRP(option)		
	Attenuation equivalent for table	1.7mmAl. eq. (Wood) 0.7mmAl. eq. (CFRP)		
	Longitudinal movement	1100mm Manual operation		
	Lateral movement	+/- 125mm Manual operation		
	Tabletop Lock	Electromagnetic lock (off-lock)		
	Vertical moving range	315mm Motor drive		
	Distance between tabletop and floor	700mm		
	Distance between tabletop and X-ray conversion Layer	73mm		
	Maximum allowable load	200kgf		
Bucky Device	Portable FPD fixing position	Center position		
	Bucky device moving stroke	380mm (+/- 190)		
	X-ray grid (Fixed grid)	Dimensions	438mm x 479mm	
		Intermediate material	Al	
		Density, ratio Note) Select one of the listed Grids	40 lines/cm, 10:1 52 lines/cm, 8:1	
Mounting/removing grid		Possible		
Installation Conditions	Required space for installation	5,000(W) x 3,500(L)mm (to combine with the X-ray support device)		
	Mass	120kg		
	Power Supply	Single-phase AC100V, 0.1kVA, 50/60Hz		

**Options**

Item	Description
Compression belt	This belt to be attached to the sides of the tabletop secures the patient's radiography region to the tabletop
Lateral cassette holder	This holder to be attached to the side of the tabletop holds a cassette in lateral radiography.
Grip switch	This switch to be attached to the side of the tabletop operates the floating tabletop.
CFRP tabletop	This tabletop is made of CFRP (Carbon Fiber Reinforced Plastic).
Hand grip	Equipped with tabletop side and grasped by patient so that the patient position keeps steady.
Drip stand	Attached to the tabletop side and suspends the drip bins.
FPD rotation tray	The FPD tray can be rotated 90 degree to change the orientation of FPD. (Portrait↔Landscape) This option is only for 14 x 17 inch (35 x 43 cm) FPD.

**X-Ray Radiography Stand  
BR-120**



Bucky device	Distance between Bucky device guathal hub and floor	$h = 627(643) - 2,127(2,143)$ mm (Manual operation) $h = 655(671) - 2,097(2,113)$ mm (Motor-driven operation) (Figures in parentheses are dimensions when mounted on a base plate)		
	Operation	Manual or motor drive(option) Electromagnetic lock (off lock)		
	Distance between Bucky device guathal hub and center of detector	247mm		
	Distance between Bucky device front face and X-ray conversion Layer	40mm		
	Portable FPD fixing position	Center reference, Top reference or bottom reference		
	X-ray grid (Fixed grid)	Dimensions	438mm x 479mm	
		Interspacer material	Al	
		Density, ratio Note) Select one of the listed Grids	40 lines/cm : 10:1 or 12:1 52 lines/cm : 12:1	
		Mounting/removing	Possible	
	Attenuation equivalent for front panel	0.63mm Al eq.		
Installation conditions	Required space	650mm(L) x 400mm(D)		
	Required ceiling height	2,350mm		
	Mass	Standard: 120kg When motor drive/Longview option installed : 145kg Fender wall for Longview (option) : 70kg		
	Power Supply	Single-phase AC100V, 0.2kVA, 50/60Hz		

**Options**

Item	Description
Overhead hand grip	For lateral chest exam to grip overhead, adjust the height by the position of gripping.
Cassette holder	Cassette unit is attached on bucky device and holds a film cassette.
Base plate	Base plate is installed when the equipment cannot be mounted in the standard holes.
Wall mounting option	Fix the top of column to wall. Use when the fixation to floor is difficult.
Side hand grips	For P-A chest exam. to grip both hands, a pair of left and right.

Item	Description
Bucky tracking device	By servo tracking device, the following functions are attached with CH-200 combined: X-ray tube unit focus of X-ray tube support tracks automatically the center on height of Bucky device. Collimator for radiography radiation field operates automatically.
Compression belt	This belt fixes the radiography area of a patient on the Bucky device.
Handy switch unit	To control collimator near a patient with handy switch unit.
Motor drive unit (w/ Foot switch)	To move the Bucky device vertically with foot switch.
FPD rotation tray	The FPD tray can be rotated 90 degree to change the orientation of FPD. (Portrait↔Landscape) This option is only for 14 x 17 inch (35 x 43 cm) FPD.
Fender wall	To be used for long view radiography. A compression band (option) for the patient stand can be used to hold the patient in position.
Hand grip for Fender wall	Supports the posture of the patient when he/she is resting on the patient stand.

**BR-120T**

Item	Specifications	
<p>① Stand ② Bucky Device ③ Fender wall for Longview (option)</p>		
Bucky device	Distance between Bucky device guathal hub and floor surface $h1 = 627(643) - 2,127(2,143)\text{mm}$ (Manual operation) $h1 = 655(671) - 2,097(2,113)\text{mm}$ (Motor-driven operation) $h2 = 540(556) - 2,040(2,056)\text{mm}$ (Manual operation) $h2 = 568(584) - 2,010(2,026)\text{mm}$ (Motor-driven operation) (Figures in parentheses are dimensions when mounted on a base plate)	
Operation	Manual or motor drive (option) Electromagnetic lock (off lock)	
Distance between Bucky device guathal hub and center of detector	247mm	
Distance between Bucky device front face and X-ray conversion Layer	40mm	
Bucky device tilting angle (manual operation)	-20°, 0° (vertical), 15°, 30°, 45°, 60°, 75°, 90° (horizontal)	
Portable FPD fixing position	Center reference, Top reference or bottom reference	
X-ray grid (Fixed grid)	Dimensions	438mm x 479mm
	Interspacer material	Al
	Density, ratio Note) Select one of the listed Grids	40 lines/cm : 10:1 or 12:1 52 lines/cm : 12:1
	Mounting/removing	Possible



Item		Specifications
	Attenuation equivalent for front panel	0.63mm Al eq.
Installation conditions	Required space	650mm(L) x 700mm(D)
	Required ceiling height	2,350mm
	Mass	Standard: 160kg When motor drive/Longview detection option installed: 185kg Fender wall for Longview (option) : Approx.70kg
	Power Supply	Single phase AC100V, 0.2kVA, 50/60Hz

**Options**

Item	Description
Overhead hand grip	For lateral chest exam to grip overhead, adjust the height by the position of gripping.
Cassette holder	Cassette unit is attached on bucky device and holds a film cassette.
Base plate	Base plate is installed when the equipment cannot be mounted in the standard holes.
Side hand grips	For P-A chest exam. to grip both hands, a pair of left and right.
Bucky tracking device	By servo tracking device, the following functions are attached with CH-200 combined: X-ray tube unit focus of X-ray tube support tracks automatically the center on height of Bucky device. Collimator for radiography radiation field operates automatically.
Compression belt	This belt fixes the radiography area of a patient on the Bucky device.
Handy switch unit	To control collimator near a patient with handy switch unit.
Motor drive unit (w/ Foot switch)	To move the Bucky device vertically with foot switch.
FPD rotation tray	The FPD tray can be rotated 90 degree to change the orientation of FPD. (Portrait↔Landscape) This option is only for 14 x 17 inch (35 x 43 cm) FPD.
Fender wall	To be used for long view radiography. A compression band (option) for the patient stand can be used to hold the patient in position. Maximum allowable load: 295kg
Hand grip for Fender wall	Supports the posture of the patient when he/she is resting on the patient stand.

**BR-120M**

Item		Specifications
① Stand ② Bucky Device		
Bucky device	Distance between Bucky device guathal hub and floor	$h = 627(643) - 2,127(2,143)$ mm (Manual operation) (Figures in parentheses are dimensions when mounted on a base plate)
	Operation	Manual Electromagnetic lock (off lock)
	Distance between Bucky device guathal hub and center of detector	247mm
	Distance between Bucky device front face and X-ray conversion Layer	33.5mm

Item		Specifications	
	Portable FPD fixing position	Center reference, Top reference or bottom reference	
	X-ray grid (Fixed grid)	Dimensions	438mm x 479mm
		Interspacer material	Al
		Density, ratio (Note) Select one of the listed Grids	40 lines/cm : 10:1 or 12:1 52 lines/cm : 12:1
		Mounting/removing	Possible
Attenuation equivalent for front panel	0.63mm Al eq.		
Installation conditions	Required space	650mm(L) x 400mm(D)	
	Required ceiling height	2,350mm	
	Mass	120kg	
	Power Supply	Single-phase AC100V, 0.2kVA, 50/60Hz	

**Options**

Item	Description
Overhead hand grip	For lateral chest exam to grip overhead, adjust the height by the position of gripping.
Cassette holder	Cassette unit is attached on bucky device and holds a film cassette.
Base plate	Base plate is installed when the equipment cannot be mounted in the standard holes.
Wall mounting option	Fix the top of column to wall. Use when the fixation to floor is difficult.
Side hand grips	For P-A chest exam. to grip both hands, a pair of left and right.
Compression belt	This belt fixes the radiography area of a patient on the Bucky device.
FPD rotation tray	The FPD tray can be rotated 90 degree to change the orientation of FPD. (Portrait $\leftrightarrow$ Landscape) This option is only for 14 x 17 inch (35 x 43 cm) FPD.

**Digital Radiography System**

Item		Specification
Digital Radiography System	Hard disk	500GB or more
	Memory	4GB RAM or more
	CPU	2.2GHz or more
	OS	Windows 10 Professional 64 bit
	Resolution of LCD	1,280 x 1024 or more
	Image Preview	Up to 2 seconds
	R – R time	9 seconds (typ.)
	Image Processing	Histogram and LUT curve Anatomical Part control LUT control Enhancement control Dynamic Range Adjustment control Noise Reduction control Grid Suppression control Scatter Correction control (option) Sharpness Adjustment control Peripheral Mask control Long View Image (SpeedStitch) (option) Advanced Edge Enhancement (option)
	DICOM	Print, Storage, MWM, MPPS, COMMITMENT, RDSR
	Flat Panel Detector (FPD)	Application
Size of imaging unit		CXDI-410C Wireless: W460xD460xH15.7mm CXDI-710C Wireless: W384xD460xH15.7mm CXDI-810C Wireless: W307xD384xH15.7mm CXDI-401C Wireless: W460xD460xH15.4mm CXDI-701C Wireless: W384xD460xH15mm CXDI-801C Wireless: W307xD384xH15mm
Scintillator		CsI
Pixel Size		125 micron
Effective number of pixels		CXDI-410C/401C Wireless: 3,408 x 3,320 CXDI-710C/701C Wireless: 2,800 x 3,408 CXDI-810C/801C Wireless: 2,192 x 2,800
Effective field of view		CXDI-410C/401C Wireless: 426 x 415mm CXDI-710C/701C Wireless: 350 x 426mm CXDI-810C/801C Wireless: 274 x 350mm
Dynamic Range		About 4-digit level
Gradation		16 bit (65536 gradations)
Attenuation equivalent of the detector front panel		CXDI-410C/710C/810C Wireless: Up to 0.21mm Al eq. CXDI-401C Wireless: Up to 0.38mm Al eq. CXDI-701C Wireless: Up to 0.46mm Al eq. CXDI-801C Wireless: Up to 0.38mm Al eq.
Weight (Including battery pack)		CXDI-410C Wireless: 2.8kg CXDI-710C Wireless: 2.3kg CXDI-810C Wireless: 1.8kg CXDI-401C Wireless: 3.8kg CXDI-701C Wireless: 3.3kg CXDI-801C Wireless: 2.3kg
Max. Exposure Time		3,000 msec
Mechanical Strength		Partial load: 100kg, given 40mm diameter Uniform load: 310kg over all surface
Water proof		CXDI-410/710/810C Wireless: IP57 CXDI-401C Wireless: IPX4
Built in Memory		CXDI-410/710/810C Wireless: 99 frame CXDI-401C Wireless: N/A

Item		Specification
	Battery Life	CXDI-410/710/810C Wireless Max. 1,000 frame (7sec. interval) Typical 140 frame (100sec interval) CXDI-401/701/801C/G Wireless, 70/80C Wireless Max. 1,200 frame (9sec. interval) Typical 140 frame (100sec interval)
	Battery Charge Time	CXDI-410/710/810C Wireless Approx. 2H by Docking Station Approx. 2.5H by Battery Charger Approx. 2H with wiring Unit CXDI-401/701/801C/G Wireless, 70C/80C Wireless Approx. 3H by Battery Charger Approx. 6H with wiring Unit
	Wireless Communications	Standard
Frequency band		2.4GHz / 5GHz

**Battery Pack LB-1A(CXDI-401/701/801C Wireless)**

Item	Specification
Type	Lithium ion battery
Operation temperature range	5 to 35 degree C
Rated voltage	11.1VDC
Capacity	Typ. 2,490mAh / Min. 2,400mAh
Cycle life	Approx. 300cycles (fully charged to fully discharged)
Dimensions and mass	127 x 161 x 7mm 250g

**X-ray Interface Unit XB-1A(CXDI-401/701/801C Wireless)**

Item		Specification	
Rated power supply: INPUT		12V DC, 0.25A (powered by AC adapter)	
Dimensions and mass		195 x 140 x 55mm 1.0kg (excl. cables)	
AC adaptor	Model No.	MPU16A-105	
	Rated power supply	INPUT:	100 to 240V AC, 47 to 63 Hz, 0.33 to 0.18A
		OUTPUT:	12V DC, 1.25A max.
		Dimensions and mass	104 x 42 x 31mm 160g

**Battery Pack LB-4A (CXDI-410/710/810C Wireless)**

Item	Specification
Type	Lithium ion battery
Operation temperature	5 to 35 degree C
Operation humidity	85% Rh or less
Rated voltage	11.1 VDC
Capacity	Typ. 1,660mAh / Min. 1,600mAh
Cycle life	Approx. 300cycles (fully charged to fully discharged)
Dimensions and mass	93 x 162 x 7mm 160g

**CXDI-Multi Box MB-4A (CXDI-410/710/810C Wireless)**

Item	Specification
Rated power supply: INPUT	100 to 240VAC, 50/60Hz, 0.59 to 0.32A
Operation temperature range	5 to 35 degree C
Operation humidity	30 to 80% Rh (w/o condensation)
Operation Atmospheric pressure	613 to 1060hPa
Dimensions and mass	Approx. 240 x 178 x 68mm Approx. 1.4kg (excl. cables and cords)

**Exposure condition linkage**

APR linkage	The exposure conditions on the X-ray high voltage generator are automatically set in conjunction with the DR protocol selected on the DR console. For the setting, there are the following two methods: <ul style="list-style-type: none"> <li>• X-ray conditions</li> <li>• Auto positioning</li> <li>• Clinical application (for example, Long View)</li> </ul>
Exposure field size interlock (option)	The exposure field size on the collimator is automatically adjusted in conjunction with the radiography menu selected on the DR console. <p>Note that selecting the exposure field size on the X-ray tube support also switches the exposure field size on the DR console.</p>
Patient information display (option)	The patient information on the DR console is also displayed in the X-ray tube support screen. The displayed items are as follows: <ul style="list-style-type: none"> <li>• Name</li> <li>• Gender</li> <li>• Age</li> <li>• ID number</li> </ul>

\*: Operation icon which indicates X-ray tube used, radiography technique, and FPD used

**Long View Radiography Function (option)**

This option allows for generating a long view radiographic image by taking X-rays of continuous body parts, with the FPD position and the exposure field being interlocked.

Item	Details
Long view radiography range	Stand: 160cm max. (4 exposure) Table: 80cm max. (2 exposure) (The value on the FPD detection surface. The region varies depending on the size and direction of the FPD, and the amount of image overlap.)
No. of exposures for a long view image	4 exposures max. (The set long view radiography region is evenly split by the No. of the exposures.)
Long view radiography time	CXDI-710/410CW: 25 second (wireless) (typ.) CXDI-701/401CW: 24 second (wired connection) (typ.) In case of Speed stich with 3 shots at bucky stand. From the start of the first exposure until third exposure is completed.

Item	Details
Reconstruction time	8 second (typ.) From last exposure to displaying Long View image.
Supported FPD	CXDI-710C Wireless CXDI-410C Wireless CXDI-701C Wireless (wired connection required) CXDI-401C Wireless (wired connection required)

## Operation Environment

### Digital Radiography System

Item	Specifications
Ambient temperature	5 to 35 degree C
Relative humidity	30 to 80% (non condensing)
Atmospheric pressure	700 to 1060hPa

### Except Digital Radiography System

Item	Specifications
Ambient temperature	10 to 40 degree C
Relative humidity	30 to 85% (non condensing)
Atmospheric pressure	800 to 1060hPa

## Power Supply

### Except Digital Radiography System

Item	Specifications
Phase	3-phase, single-phase
Frequency	50/60Hz
Standard voltages	3-phase 200/220/240/380/400/415/440/480V Single-phase 200/220/230/240V
Permitted voltage range	+/- 10% of standard voltage
Supply capacity	3-phase 120kVA Single-phase 14.9kVA

### Remarks

- \* Every value in this Product Data Sheet is a standard value, and it may vary a little from the actual at each site.
- \* The appearances and specifications are subject to change for reasons of improvement without notice.
- \* Certain configurations may not be available pending regulatory clearance. Contact your Shimadzu representative for information on specific configurations.

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Shimadzu Corporation Medical Systems Division has been certified by TÜV Rheinland as a manufacturer of medical systems in compliance with ISO9001:2015 Quality Management Systems and ISO13485:2016 Medical Devices Quality Management Systems.

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- (3) Certain configurations may not be available pending regulatory clearance.  
Contact your Shimadzu representative for information on specific configurations.
- (4) Before operating this system, you should first thoroughly review the Instruction Manual.