

<Confidential : 내부 배포용(해외)>
OSCAR Series - Specification (2019.10.29)

Type of X-ray detector				LI (Image Intensifier)		FPD (Flat Panel Detector)	
Model name				OSCAR Classic		OSCAR Prime	
Illustrate							
Specifications							
X-ray generator	Type			HFG Inverter/ 80Hz			
	Power output			5.3kW			
	X-ray tube	Type		Stationary			
		Focal spot size		0.5mm/ 1.8mm			
		Target angle		16°			
			35.5kJ (50kHU)				
Cooling			Active air cooling				
Housing heat unit (HU)			2,217,600				
X-ray Detector	LI	Nominal entrance field size		Φ9" (Φ230mm)		-	
		Output image diameter		Φ25±0.5mm		-	
		Useful Entrance Field Size		Triple (9"/ 6"/ 4.5")		-	
		DQE		65% @ 59.5keV		-	
		Conversion factor		min. 29 (cd/m²)/(μGy/s)		-	
		Resolution (Center@Normal mode)		52 lp/ca		-	
	Camera	Contrast ratio (10% Large area@Normal mode)		30 : 1		-	
		Type		CCD			
		Pixel Pitch		7.4μm * 7.4μm			
		Resolution		1,004 *1,004			
		Frame Rate		~30fps			
		A/D Conversion		12bit			
	FPD	Data Interface		Gig-E(CAT6)			
		Type		-		CMOS	
		Pixel Pitch		-		100μm	
		Active Area		-		260mm * 256mm	
		Resolution		-		2,600*2,560 / 1,300*1,280	
		Scintillator		-		CsI:Tl	
		Binning		-		1*1 / 2*2	
		Max. Resolution		-		4.6 lp/mm	
		MTF		-		70%@0.0 lp/mm	
		DQE		-		60%(@0.5lp/mm)	
		Frame Rate		-		~30fps	
		A/D Conversion		-		16 bit	
		Data Interface		-		Gig-E(CAT6)	
Collimator	Composition		4 Blade Shutter				
	Shape of collimation		Rectangular				
	Shutter movement		Asymmetric				
	Shutter Rotating		180°				
Fluoroscopy	Velocity	Open-Close	5sec/ Full stroke				
		Rotating	180°/ 15sec				
	Continuous Mode	Small Focus	kV range	40kV ~120kV			
			mA range	0.2mA ~ 6mA			
		Max. Output	550W (110kV, 5mA)				
	Pulse Mode	Large Focus	mA range	2mA ~ 20mA			
		Small Focus	pps	1, 2, 4, 8, 15			
		Large Focus	pps	1, 2, 4, 8, 15			
		Large Focus	mA range	2mA ~ 20mA			
	Radiography	Film Mode	Large Focus	kV range	40kV ~120kV		
mA range				2mA ~ 40mA			
exposure time				0.5sec			
mA range				20mA ~ 53mA			
mAs range				0.6mAs ~ 200mAs			
AEC			X				
exposure time range			0.03sec ~ 6.66 sec				
Image Processing			ABC	☐			
			DNR	☐			
			Motion detection	☐			
			Metal correction	☐			
			Anatomical preset	☐ (4mode : Hand, Knee, Spine, Thoracic)			
Imaging Software	Image format	DICOM	Secondary Capture (CS)				
			Angiography (XA)				
			Radiation Dose Structured Report				
	Export (DVD/ USB)	Single image	BMP/ JPG/ PNG/ DCM				
	Import (DVD/ USB)	Cine image	DCM/ AVI				
DICOM interface			DCM				
Image swap			Storage commit, Store, Q/R, Print, Worklist, MPPS, RDSR				
Mechanical	Dimension	Range of angulation	Orbital Rotation (°)	160° (100°+60°)		180° (90°+90°)	
			Oblique Rotation (°)	460° (±230°)			
		Panning motion (°)	25° (±12.5°)				
		Range of movement	Horizontal Travel (mm)	200mm			
			Vertical Travel (mm)	500mm			
		SID	1,000mm				
		Free space	800mm				
		Depth	725mm				
Grid	Lowest lateral Height		1,000mm		915mm		
	SID		1,000mm				
	Ratio		8:01				
Function & Usability	Basic	Safety	Low dose mode	☐ (70% mA Output)			
			X-ray warning lamp	☐ (@Monitor Cart)			
		Operation Panel	Touch LCD	10.4" Touch monitor			
			Rotatable arm	360°			
		Monitor	Operator's image view	☐			
			Type	1ea * 34" Color			
			Brightness	300cd/m²			
		Monitor Cart	Resolution	2,560 * 1,080			
			Contrast ratio	1,000 : 1			
		Exposure switch	Monitor Stand	Fixed			
	Thermal printer attachable		Option				
	Hand switch		1 ea				
	DSA	Frame rate	Foot switch	2 Pedals (Shot, Save)			
				1, 2, 4, 8			
			Native DSA	☐			
		Motion Matching	Motion Matching	☐			
			Post-Processing	☐			
			DSA Image player	☐			
			DSA Land marking	☐			
			DSA Brightness	☐			
			DSA Contrast	☐			
		Roadmap	Auto Roadmap Mask	☐			
			Manual Roadmap Mask	☐			
			Roadmap Land marking	☐			
			Roadmap Brightness	☐			
			Roadmap Contrast	☐			
			Roadmap Pixel Shift	☐			
		Option	Safety	Dose calculation Software	☐ (x Dose Report)		
				Dose calculation Hardware	☐ (DAP meter)		
			Iris Collimator	8 Leaves Iris (Octagonal)			
	Collimation		Virtual collimator	☐			
	Monitor 1		Type	1ea * 43" Color			
			Brightness	350cd/m²			
			Resolution	3,840 * 2,160 (4K)			
	Monitor 2		Contrast ratio	1,000 : 1			
			Type	2ea * 19" mono			
			Brightness	1300cd/m²			
	Monitor Cart		Resolution	1,280 * 1,024			
			Contrast ratio	1,000 : 1			
			Monitor Stand	Foldable			
	Exposure switch		Foot switch	3 Pedals (Shot/ Lift Up, Save/Lift Down, Mode)			
	Laser aimer		Cross line	Detector(LI or FPD) side			