

■ Specification

LuminoGraph II is supersensitivity cooled CCD camera. ATTO applied lowest **F0.8Lens** first in the world!!!
 ※ ImageSaver and CS Analyzer4 are selectable in English or Japanese language.

	WSE-6200H LuminoGraph II
Image data	1740 × 1300 2M Pixels 16bit TIFF/16bit CCD (8bit TIFF · JPEG · BMP)
Cooled CCD	-40°C (Environmental temperature 20 ~ 30°C)
Lens	F0.8 Supersensitivity Lens
Image Size (Resolution)	Max 260 × 200mm (170dpi) Min 90 × 70mm (490dpi) Capture position : 5 position
Filter	Holder type exchange (50mm)
Cabinet lamp	LED White lamp (Working together with cabinet door)
Option Lights (Filter is needed)	<ul style="list-style-type: none"> · VariRays · CyanoView · VISIRAYS Single color LED light(Blue or Green) · FlatViewer · WUV-20M UV light Box (Fluorescence Kit) · KoshiFundam: Source of light for photon brightness measurements
Control Software	ImageSaver6 Windows OS : Windows8.1/8/7/Vista 64/32bit
Analysis Software	CS Analyzer4 Windows OS : Windows8.1/8/7/Vista 64/32bit
Unit size	365mm(W) × 608mm(H) × 288mm(D)
Weight	20.2kg
Power	AC100V ~ 240V (± 10%) 50/60Hz
Electricity consumption	Max 150W
Accessories WSE-6200H	LuminoGraph II 1unit, USB memory (ImageSaver6 installer), Bottom plate 1pc, Tray 1pc, Acrylic gel tray 1pc, Tray for excitation light source 1pc, Filter holder 1pc, Focus sheet 1pc, Magnetic sheet 1pc, DC12V power cable1 pc, AC power cable 1pc, USB cable 1pc, Manual for instruction 1pc, Manula for ImageSaver6 1pc

■ Option

	Code No.	Product name	Composition · Application
Fluorescence	2009170	Fluorescence Kit	UV light box (WUV-M20) Filter (SWP/YA-3/OY)
	2008000	AE-6935BN VISIRAYS-BN (Blue)	Blue LED light source
	2130419	OY (VISIRAYS-BN Filter)	540nm Long Pass filter 1pc
	2130414	YA-3 (VISIRAYS-BN Filter)	560nm Long Pass filter 1pc
	2008062	BPF510 Filter for GFP	510nm Long Pass filter 1pc
	2008060	SCF515 (VISIRAYS-B Filter)	515nm Long Pass filter 1pc
	2008050	VRF487 VISIRAYS-B Filter (2pcs are required for one VISIRAYS)	Short Pass filter 1pc
	2008010	AE-6935GN VISIRAYS-GN (Green)	Green LED light source
	2130452	R-60 (VISIRAYS-GL Filter)	600nm Long Pass filter 1pc
	2008051	VRF-510 VISIRAYS-GS Filter (2pcs are required for one VISIRAYS)	Short Pass filter 1pc
	2008052	VRF-560 VISIRAYS-GL Filter (2pcs are required for one VISIRAYS)	Short Pass filter 1pc
	2008100	WSE-5500 VariRays (Epi RGB)	Blue · Green · Red LED light source
	2008115	VariRays Primary filter 1set (Blue)	481nm Short pass 2pcs
	2008116	VariRays Primary filter 1set (Green)	562nm Short pass 2pcs
	2008110	VariRays PowerBOX	AC Adapter/ switchable light power cable
	Stained Gel	2006125	Cyan fluorescence kit(WSE-6100/6200)
2008150		WSE-5600 CyanoView (Transmission type Cyan LED light)	Cyan LED light source
2195934		Gel tray V	UV transparency acrylic tray
Others	2196160	FlatViewer	White color LED light source
	2130446	ND-0.1 filter	Light reduction filter /1pc
Others	2140202	UP-X898MD Hybrid graphic printer	1unit
	2140913	UPP-110HG printer paper	10 rolls
	2006121	Filter holder for (WSE-6100/6200)	50mm square shape filter holder
	2195935	Gel tray for (WSE-6100/6200)	UV transparency acrylic tray
	2190950	Table tap	1pc

Supersensitivity (Chemiluminescence) Detection System

WSE-6200H *LuminoGraph II*

The World's first 「F0.8」 Lens
 Low noise 「-40°C」 Cooled CCD Camera
 Max 「260×200mm」 ~Min 「90×70mm」
 「AutoExposure」, Supersensitivity, Wide Dynamic range
 Modulus measurement technique
 (Supports photon brightness indication)



LuminoGraph II



NEW



LuminoGraph II

最高峰の明るいレンズ
F0.8 レンズ

超低ノイズカメラ
10℃冷却
環境温度 30℃対応

解像度
2メガピクセル

広い撮影エリア
最大 26×20cm

LuminoGraph II

Lowest lens F0.8 !! 2M Pixels

Supersensitivity ChemiLumi Imaging

Flourescence Imaging (Option)

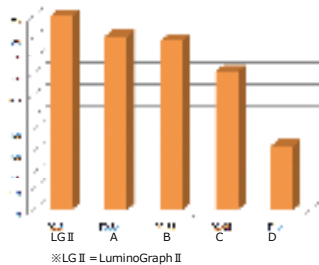
White Penetration light Imaging (Option)

High performance sensitive lens [F0.8]

LuminoGraph II is applied lowest supersensitivity lens [F0.8]. It is brighter 10%~300% than other manufacturer in market and it can detect feeble light. ATTO do not rely on digital processing and ATTO actualized wide dynamic range with low distortion performance to make high quality image.

Compapration F Value sensitivity

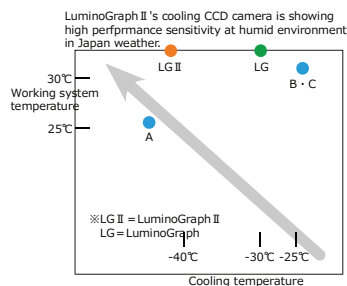
	LuminoGraph II	A	B	C	D
F値	F0.8	F0.84	F0.85	F0.95	F1.4
相対感度	100	91	89	71	33



Cooling CCD function for actulization low noise

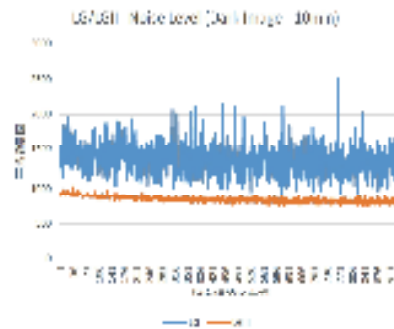
LuminoGraph II's powerful cooling CCD camera in order to actulize lower noise image. ATTO tested at [working system 30℃] to cooling [-40℃]. ATTO made the cooling -70℃ and showed low noise high performance image quality. LuminoGraphII is detetable high S/N band in short time.

	LuminoGraph II	A	B	C
Cooling ℃	-40℃	-42℃	-25℃	-25℃
Working System	30℃	25℃	28℃	28℃
Difference	-70℃	-67℃	-53℃	-53℃



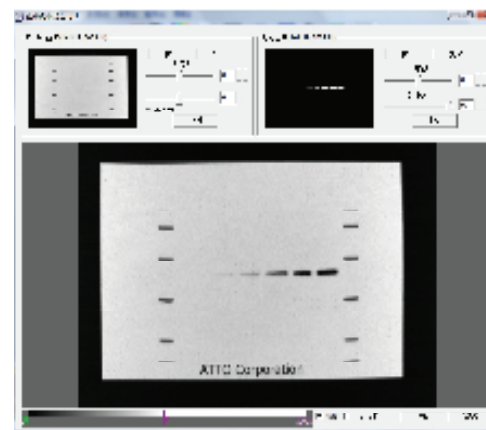
Ultra low Noise [-40℃] Cooled CCD Camera

LuminoGraph II's noise level that more lower than ATTO Luminograph(-30℃) which is low noise in good evaluation currently. It means that [-40℃] powerful cooled system is stable long time cooling system.



AutoExposure and Merge function

LuminoGraph II is controlled under ImageSaver6 software. [AutoExposure]: with dynamic range that noise reduction processing (dark arithmetic, noise reduction processing), flat field correction etc. in automatic. [Merge]: after detecting luminescence, take a membrane image and merge them.



Capture Image 260×200mm

LuminoGraph II's high performance quality [F0.8] lens for low distortion. Detection size that maximum 260×200mm. The size would be 6pcs of ATTO MiniGel and 12pcs of ATTO Compact miniGel (60×60mm). Also, 200×200mm membrane or Gel possible.

ChemiLuminescence detection System

LuminoGraph II Standard System

CS Analyser4
16bit TIFF data image analysis software
OS: Windows8.1/7/Vista
Bundle in WSE-6200H-CSP



Magnetic notice card for showing unit's working.



Code No.	Model name, Composition	Qty
2006200	WSE-6200H LuminoGraph II (F0.8 Lens) LuminoGraph main unit · Control Software ImageSaver6	1 Set
2006202	WSE-6200H-CSP LuminoGraph II (F0.8 Lens) LuminoGraph main unit · Control software ImageSaver6 Analysis Software CS Analyser4	1 Set