

High-performance Online Analysis Program

# InfReC Analyzer NS9500 Professional

InfReC Analyzer NS9500 Professional is a high-performance software which enables realtime measurement, analysis, and report generating from thermal image and visible image.

### Realtime image display & recording

Thermal image, visible image, and mixed image are displayed realtime, and recorded to PC(HDD) simultaneously.

### Screen customization

Register frequently used command menus on the toolbar, and customize the display position of the operation window for ease of use

### Camera control

From PC, focus adjustment, selection of measuring temperature range, execution of calibration can be remotely controlled.

### Realtime measurement

Realtime display of measuring points (Max. 10 points) for Max./Min./Ave. temperature.

### Trend graph display

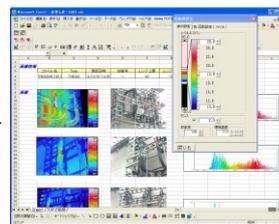
Trend graph is displayed realtime during measurement. Trend data is out put as CSV file.

### Detailed analysis, correction and editing

- Graphing, Analysis Function  
Histogram, trend graph, line profile, heat dissipation calculation, length/area size calibration, image subtraction
- Compensation functions Emissivity compensation, Distance compensation, Lens distortion correction  
Image editing
- Panorama editing\*5, thermal/visible image parallel display, image editing (Filtering/smoothing/edge enhancement/image enhancement\*7)

### Report output

- Freely lay out thermal images / visible images / graphs in Excel, Word templates, and output reports.
- The report editing function allows you to change the thermal image display settings (thermal image, figure settings) on the report.



## Specification

On-line	Control	Camera Setting	Focus(Auto focus, Focus position adjustment), Range Switching, External lens compensation.
	Display*	Temperature Scale	Continuous Auto, Manual
		Color Parellet	Color Parellet 7 types/Monochrome/reverse display, gradation(8,16,32,64, 128, 256 colors)
		Image Display	Isotherm display(color alarm), therrml/visible image mixing display*2, digital zoom
	Measurement	Image Improvement	Averaging
		Point Temperature	Designated point(10 points), Max./Min. temperature on the image
	Compensation	Box Temperature	Box temperature (10 boxes), Max./Min./Average temperature display in the box.
		Trend Graph	Max./Min./ Average temperature of designated point, inside of the box.
	Save	Emissivity Compensation	All image, designated point
		Others	Calibration (NUC), Interval NUC, Environmental reflection compensation(CAL)
Video Recording**		Thermal image (SVX) recording interval: •R550 series:1/120, 1/60, 1/30, 1/15, 1/10, 1/5, 1/2, 1 to 60[Sec.] •R500EX series:1/30, 1/15, 1/10, 1/5, 1/2, 1 to 60[Sec.] •R450 series:1/40, 1/20, 1/10, 1/5, 1/2, 1 to 60[Sec.] •R300 series:1/60, 1/30, 1/15, 1/7.5, 1/5, 1~60[Sec.]	
		Visible image (AVI) recording interval •R550/R500EX/R500 series:1/1.875, 1 to 60[Sec.] •R450 series:1/2.5, 1~60[Sec.] (R450-D:1/2, 1 to 60[Sec.]) •R300 series:1/7.5, 1 to 60[Sec.]	
		Still Image Recording***	JPG or BMP
Setting File	Camera control value/environmental settings		
Off-line	Operation	File Management	Thumbnail display, image editing, report database, file serch (Conditions: File name, date, tempature inside of figure, comment)
	Display	Temperature Scale	Arbitrarily set upper / lower / center temperatures
		Color Parellet	7 colors / monochrome / reversed display, gradation (8, 16, 32, 64, 128, 256 colors)
		Image Display	Isotherm display(Iso), therrml/visible image mixing display** , digital zoom, contrast enhancement
	Measurement	Others	Panorama editing**5, Audio playback**6
		Point Measurement	Designated point(20 points), auto temperature tracking(Max./Min.)
		Area Measurement	Box/Polygon/Circle(20 each), Max./Min./Average temperature of each figure
		Line Measurement	Line profile (vertical / horizontal / diagonal / rectangular / crosshair)
		Peak/bottom hold	Cursor display with Max. / Min. temperature in all images / each figure
		Trend Graph	Point temperature, Max. / Min. / Average temperature in all images / each figure
Compensation	Histogram	All images, Each figure	
	Image Analysis	Thermal image subtraction, Heat dissipation calculation, Length/area measurement	
Output	Emissivity Compensation	All images, designated points, figures, environmental temperature (background temperature) setting	
	Image Compensation	Filtering, smoothing, edge enhancement, image enhancement**7	
	Others	Distance compensation (ambient temperature, humidity, distance), lens distortion correction	
Product configuration	Data Output	Video: AVI, still image: BMP / JPG, temperature data: CSV / text	
	Report Output	MS-Word Format, MS-Excel Format	
Product configuration		Installation disk(CD-Rom) with operation manual including Installation manual, license agreement, user registration card	

## Compatible models\*8, data format

If you already have our products and are considering purchasing this software, please contact your sales representative.

On-line (Recording data format)	R Series	JPG(Still image), SVX( Moving image), AVI( Visible Image)
Off-line (Playback data format)	R Series, G Series	JPG(Still image), SVX( Moving image)

## NS9500 Series Function and Comparison Chart

		Professional	Standard	Lite**9	
On-line	Control, Measurement, Save	Thermal image/Visible image/Mixing image**2	yes	N/A	N/A
		Image recording(Moving image/Still image)	yes	N/A	N/A
		Figure settings	yes	N/A	N/A
		Camera control	yes	N/A	N/A
		Trend graph	yes	N/A	N/A
Off-line	Search	Image customization	yes	N/A	N/A
		Database search	yes	yes	N/A
		Tempaerature value search	yes	yes	N/A
		Date time search	yes	yes	N/A
		Point temperature	yes	yes	yes
	Analysis	Area temperature	yes	yes	yes**10
		Hot/Cold spot	yes	yes	yes**11
		Trend graph	yes	yes	N/A
		Histogram	yes	yes	yes
		Line profile	yes	yes	yes
		Thermal /Visible image mixing	yes	yes	yes
		Subtraction function	yes	yes	N/A
		Panorama editing function	yes	yes	yes
	Output	Heat dissipation calculation	yes	yes	N/A
		Length/area calculation	yes	yes	N/A
Image save		JPG(Still image), BMP(Still image), AVI(Moving Image)			
Excel save		yes	yes	N/A	
Others	Text save (CSV)	yes	yes	N/A	
	Report (Excel/Word)	yes	yes	yes	
	Multilingual	yes**12	yes**13	yes**13	

\*1 The setting range conforms to the specifications of the connected device.

\*2 R series only

\*3 Saved data can be played back off line.

\*4 It can not be played back when there is no visible data.

\*5 Panorama mode data only

\*6 Only when play back data with voice recorded.

\*7 Only images shot by R-series super-resolution (SR) mode

\*8 Not applicable to custom range, custom lens.

\*9 NS9500Lite is a standard accessory software.

\*10 Only BOX, Line

\*11 Only entire image, BOX, Line

\*12 Japanese, English, Germany, Chinese(Traditional), Russian

\*13 Japanese, English, German, Spanish, Chinese(Traditional, Simplified), Russian, Portuguese, Korean, French



[InfReC] is a coined word that stands for "InfraredCamera (meaning infrared camera)" and also means "a device that captures infrared information." In addition to the field of temperature measurement, we develop and provide products that contribute to the safety and security of society, such as environmental protection, security and fever screening.

★ This software is a "catch-all regulated product" by the Japanese Government.

★ In addition to the Group A (Ministry of Economy, Trade and Industry: see Appendix 3 of the Export Trade Control Ordinance), a license from Japan may be required for exporting or providing technology to non-residents.

★ Please contact Avio sales for detail.

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- The screen in the catalog is a inset synthesis.
- Specifications, designs, prices, etc. are subject to change without notice for improvement. Also, the color of the photo may be slightly different from the actual product color due to printing.

## Operating environment

Hardware	CPU	Core i5 2.0GHz or higher
	Memory	2.0GB or higher
	Display	High resolution display XGA (1024x768) or higher. More than 65536(16bit) colors are required.
	Disk unit	CD-ROM drive HDD: 100MB or more free space required (for program installation)
	Interface	USB port for USB 2.0
Software	OS (Basic Software)	Windows10 Home/Professional/Enterprise (32bit/64bit) Windows7 Ultimate/Professional/Home Premium (32bit/64bit) *It can be used with Ver2.7A on Windows8.1 or earlier OS
	Application	Microsoft Word 2016 (32bit/64bit) Microsoft Excel 2016 (32bit/64bit) *Required for report output, data conversion.

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### WARNINGS & CAUTIONS



- Before using this product, please carefully read the provided Operation Manual "WARNINGS" & "CAUTIONS" section to ensure proper operation.
- Please do not place the product in high temperature, high humidity or high inert gas environments.

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