



New Series Released!

NEC

Thermo GEAR G120/G100

World First!※1 Panoramic Thermal Image Shooting Function / Vibration Alarm Function Installed!



Innovative Thermograph Equipped with High Quality Imag/High Performance in Addition to Multi-Angle LCD Screen!

Wide-Angle Shot World First ※1 Thermal Image Panorama ※2				Thermal Image Movie SD Card Direct Recording (10Hz) ※2					
Image Fusion Function Parallel Display, etc		Parallel Display		Synthetic Display		Macro Shot 10cm Vicinity			
Alarm Function World First ※1 Vibration Alarm ※2	Wide View Angle 32° × 24°	LCD Screen 3.5 inch Multi-Angle	Easy Operation Icon Display Auto Focusing Installed	Digital Enhancement Function New Development Image Processing Engine Installed ※2	Data Storage Format JPEG with Data ※3				

※1:World first [Panoramic Thermal Image Shooting Function],[Vibration Alarm Function](Surveyed by our company at end of December,2009.)
 ※2:Installed only in G120.
 ※3:Dedicated software is required for changing temperature scale or data analysis.



NEC Avio Infrared Technologies Co., Ltd.

Specifications

Model	G120	G100	
Basic Performance	Measuring Range	-40°C to 500°C High Temperature Range: 350°C to 1500°C (Option)	
	Resolution (NETD)	0.08°C (at 30°C, 60 frames/sec.)	
	Accuracy	± 2°C or ± 2% of Reading, whichever is greater	
	Infrared Detector	Uncooled Focal Plane Array	
	Thermal Image Pixels	320 (H) x 240 (V) pixels	
	Spectral Range	8 to 14µm	
	Frame Time	60 frames / sec	
	Field of View	32°(H) x 24°(V) (standard lens f _L = 14mm)	
	Spatial Resolution (I.F.O.V.)	1.78mrad	
	Focusing Range	10 cm to ∞ (standard lens) (Temperature Accuracy Assurance is 30 cm or more)	
A/D Resolution	14bits		
Operation / Image Quality Improvement	Automatic Focus	Provided	
	Setting of Level/Sense/Scan	Auto / Manual	
	Operation Support Function	Setting of Item / Each Function / Status is displayed by icon.	
	Multiple Language menu	16 Languages (English, Danish, Dutch, Finnish, French, German, Italian, Japanese, Korean, Norwegian, Portuguese, Russian, Spanish, Swedish, Simplified Chinese and Traditional Chinese)	
	Correcting Function	Correction for Emissivity, Distance, Environmental Reflection and Background.	
	Averaging	Provided	
Display Performance	Thermal / Visual Image Fusion Display	Fusion Display of Thermal Image/Visual Image, Parallel Display of Thermal Image / Visual Image	
	Color Palette	Rainbow, Iris, Brightness, Color, Hot Iron, Hot Black, Hot White	
	Gradation	256, 16 and 8 tones	
	Thumbnail Display	9 image display	
Measurement Performance	Digital Zoom	1. to 4 times	
	Panoramic Shooting Function	Provided (Scan Synthesis)	No
	Multipoint Temperature Display	5 points	
	Multipoint Emissivity Correction	5 points	
	Emissivity Back Calculation Function	Provided	
	Temperature Difference between Two Points	Provided	
	Temperature Analysis Function in Assigned Region	Temperature Display of Maximum / Minimum / Average in assigned region (5 pieces of BOX)	
	Profile	Horizontal / Vertical	
	Temperature Search Function	Searching maximum / minimum temperature, automatic display of each position	
	Alarm Function	Mode: Alarm Sound, Alarm Display, Vibration Alarm ON / OFF Setting Determination Temperature, External Alarm Output	
Data Storage	Storage Device	SD Card, corresponding to SDHC	
	Thermal Image Move	Provided (10fps) Storage in SD Card	No
	Still Image	JPEG with Temperature Data, 14bits	
	Interval Recording	3 s to 60 min, Automatic Recording of Thermal Image	
Interface	Event Trigger Recording	Provided	
	USB 2.0	Mass Storage Function	
	Alarm Output	No-voltage Contact Output	
Others	Video Output	NTSC / PAL Changoover (Simultaneous use is unable with LCD)	
	Laser Pointer	Provided (Class-2 Red Color)	
	Visual Camera	2 Mega pixels CMOS Camera	
	LED Light	Provided	
	Voice Annotation	30 sec Recording / Replay per image	
	Text Annotation	Read-in maximum 256 characters form SD Card and attach them on Thermal Image	
	Display Unit	3.5 inch Color LCD Monitor (320 x 240) with Tilt function and brightness control function	
	PC Software	InfReC Analyzer NS9500LT (Limited Function Version), provided as Standard Accessory	
	Standard Accessories	Hard Case x1, Battery Pack x1, Battery Charger x1, AC Adaptor x1, Wristband x1, Operation Manual x1	
	Power	Battery	Lithium-ion Battery Pack (2,500mAh) Driving Hours: 4 Hours (typical)
AC Power (AC Adaptor)		100V to 240V AC, 50 / 60Hz	
Power Consumption		4.3W (typical)	
Environmental Conditions	Operating Temperature / Humidity	-15°C to 50°C, 90% RH	
	Vibration / Shock	29.4m/sec ² (3G) / 294m/sec ² (30G)	
	EMC	Compliant to CE (Class-A)	
Dust-proof / Splash-proof Construction	Protection Code: IP54 Equivalent		
Dimensions	Approx. 212mm (H) x 76mm (W) x 138mm (D) (excluding projections)		
Weight	Approx. 800g (including Battery Pack)		



[InfReC] is the coined abbreviation word of "InfraRed Camera" and also has the meaning of [The Device Bringing-in Infrared Information]. We are developing and providing products contributing to peace and safeness of society not only limited to temperature measuring field but also environment / security, etc.

★ Company names, merchandise names listed on this brochure are brand or trade mark of each company. ★ Listed Specifications / Design, etc, may be subjected to change for improvement without notice. In addition, the color of photo may be a little different from actual color of products since they are printed.

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PC Software

InfReC Analyzer NS9500 (optional)

(NS9500 Lite: Standard Accessories)

This is the thermal image processing / report generator software which realized easy operation with easily understandable menu and icon.

[Features]

• Easy Report Generation (MS-WORD/MS-EXCEL Format)

• Rich Processing Functions

Fusion Display of Thermal Image / Visual Image
 Subtracting Function for Thermal Image

Panoramic Synthesis Function for Thermal Image*¹
 Radiation Heat Quantity Analysis*¹

Length Measuring/Area Calculation Function*¹
 for Thermal Image

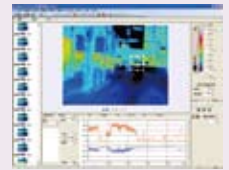
Trend Graph Display*¹

Line Profile Display

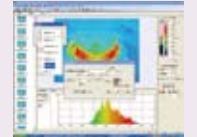
Drawing Function for Designated Point / Line / BOX / Circle*¹ / Polygonal Shape*¹

Analysis for Max./Min./Peak Temperature

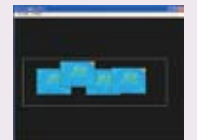
*¹: NS9500 only



Trend Graph Display



Radiation Heat Quantity Analysis

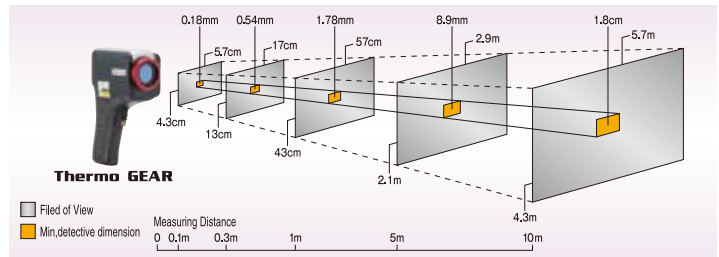


Panoramic Synthesis Function for Thermal Image

Options

Product Name	Specifications / Remarks
1500°C High Temperature Range	350°C to 1,500°C
Telephoto Lens with x 2	16° (H) x 12°, 0.89mrad (f _L =28mm)
Battery Pack	Lithium-ion Battery Pack (2,500mAh) Driving Hours: 4 Hours (typical)
Battery Charger	
LCD Hood	
Tripod (small)	
InfReC Analyzer NS9500	PC Software

Dimensions of Measuring Distance and Filed of View (Standard 14 mm Lens)



Thermo Shot F30

160x120 Pixels
 Entry Model of Visual Image
 Simultaneous Recording



CAUTION FOR SAFETY

- Please read "WARNING" & "CAUTION" in the operation manual attached to the product carefully for proper operation before using the product.
- Please do not place the product in high temperature, high humidity or place where is a lot of inert gas.

Distributor:

