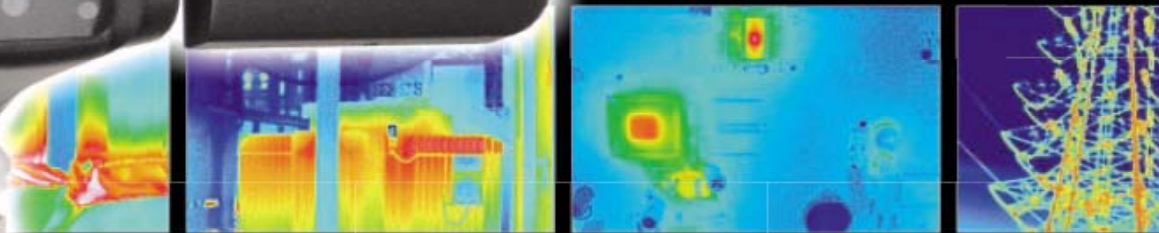


NEW

Thermo GEAR

G 120 EX/G 100EX Series

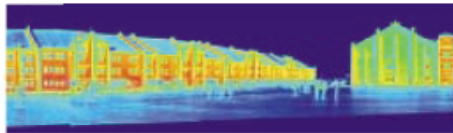


New EX Series with Upgraded Performance!!

- ▶ Measures high temperature up to 1500°C
- ▶ Resolution: 0.04°C (with S/N improvement at 30°C)
- ▶ 'Averaging Improvement' function for better image quality
- ▶ Standard grip belt for better safety & operability

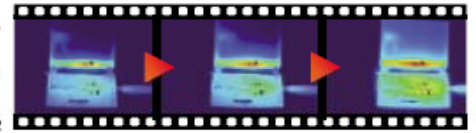
Wide-Angle Shot

World's First *1
Panoramic Thermal Image *2



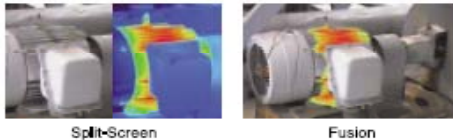
Thermal Image Movie

Direct Recording on SD Card
in Fully Radiometric
(G120EX:10fps, G120EXD:8.5fps)*2



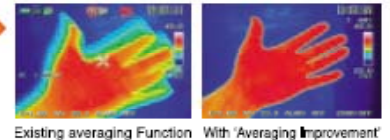
IR/Visual Integrated Display

Split-Screen, Fusion,
Alpha Blending



Averaging Improvement

Minimizes residual images
of moving object
while averaging



Alarm Function

World's First *1
Vibration*2
Sound and Display

High Temp Measurement

Up to 1500°C
as standard

3.5 inch LCD Screen

Tilting Display for Flexible
Easy Shooting Posture

Wide Field of View

Ideal in Short Distance
32°(H) × 24°(V)

Macro Shot

Min. Focus Distance:10cm

Easy Operation

GUI and Joystick for
Intuitive Operation,
Auto Focus/ Level-Sense

*1: World's first [Panoramic Thermal Image Shooting Function],[Vibration Alarm Function] (Surveyed by our company at end of December,2009.) *2: Provided on G120EX Series only.

Specifications

Model	G120EX	G120EXD	G100EX	G100EXD	
Basic Performance	Measuring Range	-40°C to 1,500°C R1: -20°C to 60°C R2: -10°C to 120°C R3: 0°C to 500°C R4: 350°C to 1500°C			
	Resolution (NETD)	0.04°C (with S/N improvement at 30°C)			
	Accuracy	R1, R2, R3: ±2% or ±2% of Reading, whichever is greater R4: ±2% or less with full scale *			
	Infrared Detector	Uncooled Focal Plane Array (microbolometer)			
	Thermal Image Pixels	320 (H) x 240 (V) pixels			
	Spectral Range	8 to 14μm			
	Frame Rate	60 frames / sec	8.5 frames / sec	60 frames / sec	8.5 frames / sec
	Field of View	32° (H) x 24° (V) (standard lens f = 14mm)			
	Spatial Resolution (LFOV)	1.78mrad			
	Focal Distance	10cm to infinity (standard lens) (For temperature accuracy: 30cm to infinity)			
Operation / Image Quality Improvement	A / D Resolution	16bits			
	Focus	Auto / Manual			
	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			
	Averaging Improvement	Provided			
	Filtering	Provided			
	Edge Enhancement	Provided		Not Included	
Display Performance	Thermal / Visual Image Fusion Display	Fusion and Picture-in-Picture with Alpha Blending, and Split-Screen Display of thermal / Visual Image			
	Color Palette	Rainbow, Iris, Brightness, Color, Hot Iron, Hot Black, Hot White			
	Gradation	256, 16 and 9 tones			
	Thumbnail Display	9 image display			
Measurement Performance	Digital Zoom	1 to 4 times			
	Panoramic Shooting Function	Provided (Scan Synthesis)	Not Included		
	Multipoint Temperature Display	Center, Max or Min & 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 (for up to 5 boxes)			
	Profile	Horizontal / Vertical			
	Alarm Function	Mode: Alarm Sound, Alarm Display, Vibration Alarm (G120EX Series only) . Color Alarm ON / OFF, Setting Determination Temperature, External Alarm Output			
	Data Storage	Storage Device	SD Card, corresponding to SDHC		
Thermal Image Movie		10fps in SD card	8.5fps in SD card	Not Included	
Still Image		Radiometric JPEG			
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	Contact Closure, No Voltage			
	Video Output	NTSC / PAL Changeover (Simultaneous use is unable with LCD)			
	Laser Pointer	Provided (Class-2 Red Color)			
	Visual Camera	2 Mega pixels CMOS Camera			
	LED Light	Provided			
	Others	Voice Annotation	30 sec Recording / Replay per image		
		Text Annotation	Annotate up to 128 characters with each Thermal Image, Import characters from SD Card.		
		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			
Power Supply	Standard Accessories	Hard Case, Battery Pack, Battery Charger, AC Adaptor, Wristband, SD Card, USB cable, Operation Manual, Software(See above), Grip Belt			
	Rechargeable Battery	Lithium-Ion Battery Pack (2,500mAh), 4 Hours of Continuous Use (typical)			
	AC Power (AC Adaptor)	100V to 240V AC, 50 / 60Hz			
Environmental Conditions	Power Consumption	4.3W (typical)			
	Operating Temperature / Humidity	-15°C to 50°C, 90% RH			
	Vibration / Shock	29.4m/sec ² (3G) / 294m/sec ² (30G)			
Dust-proof / Splash-proof Construction	EMC	Compliant to CE (Class A)			
	Protection Code	IP64 Equivalent			
	Dimensions	Approx. 212mm (H) x 76mm (W) x 138mm (D) (excluding projections)			
Weight	Approx. 800g (including Battery Pack)				

*Under Ambient Temperature Condition: 0°C~40°C at Range1. Otherwise ±3°C or ±3%

InfReC Infrared Camera
InfReC is the coined abbreviation word of "Infrared Camera" and also has the meaning of "The Device Recording Infrared Information". Our product research and development is targeted at improving the quality of life by protecting people and simplifying their daily tasks while measuring temperature, controlling environments, enhancing security, etc.

★Company names, merchandise name 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. Printed color images may differ slightly from actual product color image.

PC Software

InfReC Analyzer NS9500 Standard

(NS9500 Lite: Standard Accessories)

Thermal Image Processing and Report Generator Software
Easily identifiable menu system guides you to intuitive operation

[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 Composite Function for Thermal Image*1
Radiation Heat Quantity Analysis*1

Length Measuring/Area Calculation Function*1 for Thermal Image

Trend Graph Display*1

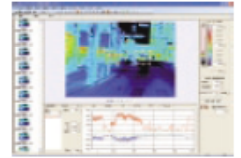
Line Profile Display

Drawing Function for Designated Point / Line / BOX / Circle*1 / Polygon Shaped*1

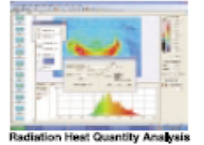
Analysis for Max./Min./Peak Temperature

*1: NS9500 Standard only

*2: Compatible PC configuration, OS system and associated application software are to be considered beforehand, Some old or new system might not be supported.



Trend Graph Display



Radiation Heat Quantity Analysis

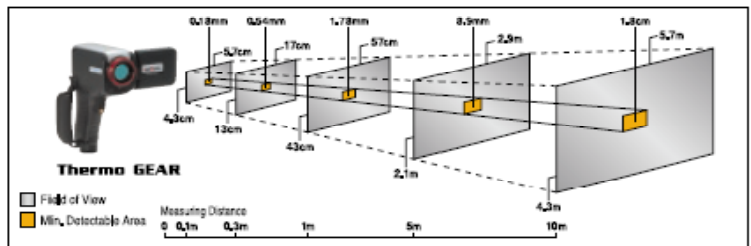


Panoramic Composite Function for Thermal Image

Options

Options	Model	Specifications / Remarks
2 x Telephoto Lens	IRL-TX02A-B	16°(H) x 12°(V) QJ8mmrd (f=28mm)
Rechargeable Battery Pack	T2UR18650F5028B	2,500mAh, 4 Hours of Continuous use (typical)
Battery Charger	NC4-SC05*10V / NC4-SC05*20V	110v or 220v
LCD Hood	IRL-H01A	
Video cable	MV-320MP	3.5mm plug, 2m
tripod (small)	US900	
InfReC Analyzer Standard	NS9500STD-B	PC Software
Portable Power for longer operation	TVB-C501	Case for 2 extra batteries (battery not included)
2 year warranty	IR5-SG100 A/B	

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



NEC Avio Infrared Technologies has long experience and expertise in developing infrared cameras since the early 1970's. There is a wide range of portable and fixed mount thermal imagers available. To find out more, visit us at: www.nec-avio.co.jp/en/ or contact our local distribution partners.



WARNINGS & CAUTIONS

- Before using this product, please carefully read the provided Operation Manual "WARNINGS" and "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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NEC

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