

### Infrared Thermal Imaging Camera

High Resolution Infrared Image for Professional Thermographer

# InfReC *R500EXseries*

#### **1.2 M pixels Infrared Thermal Imaging Camera**

- Super Resolution Mode : 1280×960 pixel
- Spatial Resolution : equivalent to 0.58mrad

#### **Real Time Transfer and Movie Recording** into PC

- Real time transfer of 640 x 480 pixel image at 30Hz in high speed (conventional ratio 2 times)
- Software makes movie recording start automatically by external trigger input to R500EX-Pro

# Temperature Resolution Upped by the Latest Noise Elimination Processing Technology

- Temperature resolution : 0.025°C by denoising feature (the highest level of this class)
- Temperature accuracy : ±1°C\*1 (the highest level of this class)

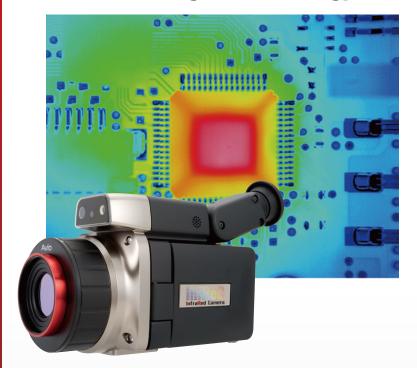
#### Variety of Lens Lineup Makes Play an Active Role in Various Measuring Scene

- 21µm Closeup Lens 52µm Closeup Lens
- 2x Telephoto Lens 2x Wide Angle Lens
- 3x Wide Angle Lens

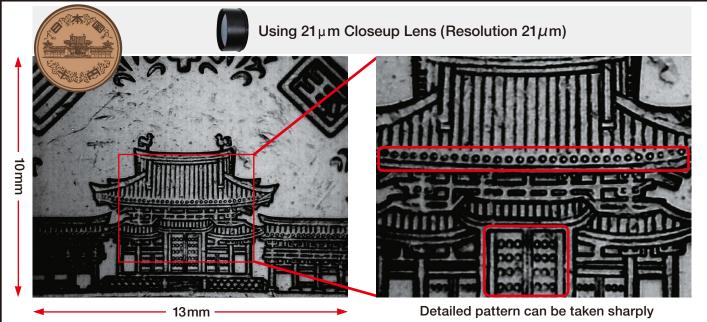
#### Selectable 2 models for Your Application

- R500EX-Pro : Measuring range: -40 to +2000°C Suitable for use in R&D, for making high temperature measurements, and for measuring sequential data.
- R500EX : Measuring range: -40 to +500°C Excellent choice for inspection of electrical facilities and remotely located pipes.
- \*1 An internal investigation as of December 2015.

## **1.2 M pixels Super Resolution** Thermal Image Technology



# Measuring From Wide Angle To Micro Area Clearly By Combination with Optional Lenses





#### Automatic Movie Recording Feature Built In

- Recording movie to connected PC automatically by external trigger input to R500EX-Pro
- Data recording linked with test equipment and field facility is available without configuring I/O system



#### **User-Friendly Operation**

#### Easy to shoot from any angle

Multi-angle Tilting LCD Display and 2 REC Key-buttons enable flexible and comfortable one-hand operation.



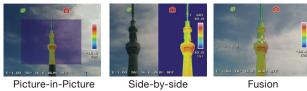




Easy to use at various angle or height

#### Various Mixing Mode

#### Easy to compare 1.2M pixels thermal image with 5M pixels visual image.



#### Measuring Distance and F.O.V

Field of View and Spatial Resolution are the same magnification with measuring distance.

Lens lype		Lens	Lens	Angle Lens	Angle Lens	
L=1m	Field of View $(H) \times (V)$		29×22cm	57×42cm	128×92cm	211×149cm
	Spational Resolution	Normal Mode	0.44mm	0.9mm	1.74mm	3.1mm
		Super Resolution (SR mode)*3	0.30mm	0.6mm	1.16mm	2.1mm

# NIPPON AVIONICS CO., LTD.

#### **Thermal Imaging Division**

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Feature         HS00EX.Pro         HS00EX         RS00EX         RS00EX           Infrared Detector         Uncooled Focal Plane Array (Microbulometer)         Spectral Range         8 to Hum           Spectral Range         8 to Hum         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         —         …		Specifications						
Infrared Detector         Uncoded Focal Plane Array (Microbolometer)           Spectral Range         16 14 µm           Spectral Range         -40 to 500°C           Sensitivity (NETD)         0.025°C at 30°C           Sensitivity (WETD)         0.05°C at 30°C at 30°C           Sensitivity (WETD)         0.05°C at 30°C at 30°C           Sensitivity (WETD)         0.00°C at 30°C at 30°C           Senstat ab pinels         0.00°C at 30°C at 30°C <th></th> <th>_</th> <th><b>F</b></th> <th></th> <th></th> <th>DEOOEV</th> <th></th>		_	<b>F</b>			DEOOEV		
Spectral Range         # to 14.µm           Measuring Range         4.0 to 200° C         -4.0 to 500° C           Sensitivity (NETD)         0.025° C al 30° C (with S.N.improvement)         -4.0 to 500° C           Accuracy         4.1° C 1         7.5Hz         30Hz         7.5Hz           Detector Pxels         640(HX 480(V) pixels         Security (S.M. 480(V) 12°         Feature (S.M. 480(V) 12°           Spatial Resolution         Standard mode         : 640(H) 4480(V) 12°         Feature (S.M. 480(V) 12°           Spatial Resolution         Standard mode         : 540(H) 4480(V) 12°         Feature (S.M. 480(V) 12°           Facal Distance         Titoen to initinity (With standard lens) 1         Feature (S.M. 480(V) 12°         Feature (S.M. 480(V) 12°           Facal Distance         Titoen to initinity (With standard lens) 1         Feature (S.M. 480(V) 12°         Feature (S.M. 480(V) 12°           Codor Paties         Type (S.M. 480(V) 12°         Feature (S.M. 480(V) 12°         Feature (S.M. 480(V) 12°           Totadation         256 32 (16 / G grade         Feature (S.M. 480(V) 12°         Feature (S.M. 480(V) 12°           Visible Cameria         OMOS camera S Mpoils         Frequencing, K.M. 480(V) 12°         Feature (S.M. 480(V) 12°           Totadation         256 32 (16 / G grade         Feature (S.M. 480(V) 12°         Feature (S.M. 480(V) 1		La				H500EX	R500EX-D	
Besuring Range        40 to 500°C        40 to 500°C           Sensitivity (NETD)         0.05°C of 30°C (with 5 Ni mprovement)								
Bits         Data Sci al SC (with SN Improvement)           Accuracy         ±1°C '1           Trane Rate         30Hz           Detector Physics         640(HX 460V) pixels           Recording Pixels         Standard mode           Spatial Resolution         Ado Manual           Adot Scale, Auto Eocus, Full Auto           Codor Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)           Codor Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)           Codor Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)           Codor Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)           Codor Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)           Detector Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)           Codor Pallets         7 pallets flambow, Brightness, Herwhite, Hot-black, etc.)						40 to 500°C		
Predict of View         Spatial Resolution         Spatial Resolution (SR model mode: 0.58mrad equivalent "3           Focal Distance         10cm to Infinity (With standard leng) <sup>44</sup> Focus           Auto Function         Auto Scale, Auto Focus, Full Auto         Calor Auto           Coldr Pallets         7, pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)         Gradation         256/32/16/8grade           Visible Camera         CMOS camera SM pixels         Visible Camera         CMOS camera SM pixels           Visible Camera         Display Functions         1 to 8 times continuous zoom (with display positioning scroll), Grid Overlay, 9 images multi-display replay model           Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         Display Functions         1 do voxable Points, Temperature search: MAXMIN x 1 each, Delta T           Temperature Display in Assigned Region         MAX, Min and AVG in Box (MAX, Min and AVG in Box         N/A           Aarm Function         Alarm Signal Output         N A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Emissivity Reverse Calculation         N/A           Data Storage         SDial Rocolex, Pro-Di: SVX file (Alvo original file)           Super Resolution (SR)         Provided         N/A <t< td=""><td>φ</td><td></td><td></td><td></td><td>S/N improvomont)</td><td>-40 10 500 C</td><td></td></t<>	φ				S/N improvomont)	-40 10 500 C		
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Predict of View         Spatial Resolution         Spatial Resolution (SR model mode: 0.58mrad equivalent "3           Focal Distance         10cm to Infinity (With standard leng) <sup>44</sup> Focus           Auto Function         Auto Scale, Auto Focus, Full Auto         Calor Auto           Coldr Pallets         7, pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)         Gradation         256/32/16/8grade           Visible Camera         CMOS camera SM pixels         Visible Camera         CMOS camera SM pixels           Visible Camera         Display Functions         1 to 8 times continuous zoom (with display positioning scroll), Grid Overlay, 9 images multi-display replay model           Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         Display Functions         1 do voxable Points, Temperature search: MAXMIN x 1 each, Delta T           Temperature Display in Assigned Region         MAX, Min and AVG in Box (MAX, Min and AVG in Box         N/A           Aarm Function         Alarm Signal Output         N A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Emissivity Reverse Calculation         N/A           Data Storage         SDial Rocolex, Pro-Di: SVX file (Alvo original file)           Super Resolution (SR)         Provided         N/A <t< td=""><td>сP</td><td></td><td></td><td></td><td>7547</td><td>2047</td><td>7547</td></t<>	сP				7547	2047	7547	
Predict of View         Spatial Resolution         Spatial Resolution (SR model mode: 0.58mrad equivalent "3           Focal Distance         10cm to Infinity (With standard leng) <sup>44</sup> Focus           Auto Function         Auto Scale, Auto Focus, Full Auto         Calor Auto           Coldr Pallets         7, pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)         Gradation         256/32/16/8grade           Visible Camera         CMOS camera SM pixels         Visible Camera         CMOS camera SM pixels           Visible Camera         Display Functions         1 to 8 times continuous zoom (with display positioning scroll), Grid Overlay, 9 images multi-display replay model           Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         Display Functions         1 do voxable Points, Temperature search: MAXMIN x 1 each, Delta T           Temperature Display in Assigned Region         MAX, Min and AVG in Box (MAX, Min and AVG in Box         N/A           Aarm Function         Alarm Signal Output         N A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Emissivity Reverse Calculation         N/A           Data Storage         SDial Rocolex, Pro-Di: SVX file (Alvo original file)           Super Resolution (SR)         Provided         N/A <t< td=""><td>erf</td><td></td><td></td><td></td><td>7.5HZ</td><td>3082</td><td>7.5HZ</td></t<>	erf				7.5HZ	3082	7.5HZ	
Predict of View         Spatial Resolution         Spatial Resolution (SR model mode: 0.58mrad equivalent "3           Focal Distance         10cm to Infinity (With standard leng) <sup>44</sup> Focus           Auto Function         Auto Scale, Auto Focus, Full Auto         Calor Auto           Coldr Pallets         7, pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)         Gradation         256/32/16/8grade           Visible Camera         CMOS camera SM pixels         Visible Camera         CMOS camera SM pixels           Visible Camera         Display Functions         1 to 8 times continuous zoom (with display positioning scroll), Grid Overlay, 9 images multi-display replay model           Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         Display Functions         1 do voxable Points, Temperature search: MAXMIN x 1 each, Delta T           Temperature Display in Assigned Region         MAX, Min and AVG in Box (MAX, Min and AVG in Box         N/A           Aarm Function         Alarm Signal Output         N A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Emissivity Reverse Calculation         N/A           Data Storage         SDial Rocolex, Pro-Di: SVX file (Alvo original file)           Super Resolution (SR)         Provided         N/A <t< td=""><td>orn</td><td></td><td></td><td></td><td>·640(H) X /</td><td>190(1/)</td><td></td></t<>	orn				·640(H) X /	190(1/)		
Predict of View         Spatial Resolution         Spatial Resolution (SR model mode: 0.58mrad equivalent "3           Focal Distance         10cm to Infinity (With standard leng) <sup>44</sup> Focus           Auto Function         Auto Scale, Auto Focus, Full Auto         Calor Auto           Coldr Pallets         7, pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)         Gradation         256/32/16/8grade           Visible Camera         CMOS camera SM pixels         Visible Camera         CMOS camera SM pixels           Visible Camera         Display Functions         1 to 8 times continuous zoom (with display positioning scroll), Grid Overlay, 9 images multi-display replay model           Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         Display Functions         1 do voxable Points, Temperature search: MAXMIN x 1 each, Delta T           Temperature Display in Assigned Region         MAX, Min and AVG in Box (MAX, Min and AVG in Box         N/A           Aarm Function         Alarm Signal Output         N A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Emissivity Reverse Calculation         N/A           Data Storage         SDial Rocolex, Pro-Di: SVX file (Alvo original file)           Super Resolution (SR)         Provided         N/A <t< td=""><td>nar</td><td>- 10</td><td>ecoluling Pixels</td><td colspan="5"></td></t<>	nar	- 10	ecoluling Pixels					
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Focal Distance         10em to Infinity (with standard lens) <sup>14</sup> Focus         Auto /Manual         Auto Scale, Auto Scale, Auto Focus, Full Auto           Auto Function         Auto Scale, Auto Focus, Full Auto         Color Pallets         7 pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)           Cardadino         256/32/16/93 grade         Visible Camera         CMOS camera 5M pixels           Visible Camera         CMOS camera 5M pixels         Side-by side, Fusion (transparency changeable). Picture-in-Picture, (transparency changeable).           Display Functions         1 to 8 times continuous zoom (with display positioning scrott).         Grid Overlay. 9 images multi-display (toplay mode)           Image Quality         Denoising, Averaging (with phots rejection). Edge enhancement         Point Temperature           Point Temperature Display in         MAX. MI and AVG in Box         N/A           Alarm Function         Alarm Signal Output         N/A           Temperature Correction         Emissivity Edwisting Reverse Calculation         N/A           Emissivity         Multi-point Correction, Emissivity Table         N/A           Emissivity         Emissivity Reverse Calculation         N/A           Dirti Stabilizer         Provided         N/A           Outok Panorama         Horizontal equivalent to 100 <sup>7</sup> / Vertical equivalent to 75 <sup>7</sup>		Focal Distance						
Focus         Auto Scale, Auto Sca								
Auto Function         Auto Scale, Auto Focus, Full Auto           Color Pallets         7 pallets (Rainbow, Brightness, Hot-white, Hot-black, etc.)           Gradation         256/32/16/8 grade           Visible Camera         CMOS camera 5M pixels           Visible Camera         CMOS camera 5M pixels           Visible Termafi Exison         Side-by-side, Fusion(transparency changeable). Picture-in-Picture, (transparency changeable)           Display Functions         11 to 8 times continuous zoom (with display positioning scrotil).           Grad Overlay, Jeinages multi-display (pelay mode)         Image Ouality           Image Ouality         Denoising, Averaging (with ghost rejection). Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAXMIN x 1 each, Delta T           Image Ouality         Max, Min and XG in Box           Alarm Display, Alarm Sound, Color Alarm, Alarm Recording,         Alarm Display, Alarm Sound, Color Alarm, Alarm Recording,           Alarm Signal Output         N/A           Emissivity, Environmental/Background, Distance         Multi-point Correction, Emissivity Table           Emissivity Built mage: 12PEG with temperature data (14 bit) Recorded with, Visible Image         Movie (only for R500EX-Pror/B500EX-Pror-D): SVX tile (Avio orginal file)           Super Resolution (SR)         Provided         N/A         Storage Device           SD Movie Recording								
Open         Open <th< td=""><td></td><td colspan="2"></td><td colspan="5"></td></th<>								
Open         Stable Camera         Stable Stable Camera           Visible Camera         CMOS camera SM pixels         CMOS camera SM pixels           Visible Camera         CMOS camera SM pixels         CMOS camera SM pixels           Visible Camera         Side by-side K-usion (transparency changeable), Picture-In-Picture, (transparency changeable), CMOS camera SM pixels           Display Functions         1 to 8 times continuous zoom (with display positioning scroll), Cdre Camera, SM pixels           Point Temperature         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAX.MIN x 1 each, Delta T           Temperature Display in MAX, MM and AVG in Box (N/A         N/A           Alarm Function         Alarm Signal Output         N/A           Alarm Display, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity Reverse Calculation         N/A           Dirif Stabilizer         Provided         N/A           Data Storage         Storage Calculation         N/A           Oute Kanorama         Horizontal equivalent to 100°. / Vertical equivalent to 75°           Sub Resolution (SR)         Provided         N/A           Oute Kanorama         Horizontal equivalent to 100°. / Vertical equivalent to 75° <td< td=""><td></td><td colspan="2"></td><td colspan="5"></td></td<>								
Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAXMIN x 1 each, Delta T           Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display in Assigned Region         MAX, MIN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Display, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Multi-point Correction, Emissivity Table           Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided           Storage Device         SD card, Conforms to SDHC           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for RS00EX-Pro-D): SVX file(Avio original file)           Super Resolution (SN)         NA           SD Movie Recording         3 sec to 60 min interval, with Visible image recorded           Text Annotation         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup> Voice Recording         3 sec to 60 min interval, with Visible image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Video Output         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup>	Ē							
Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAXMIN x 1 each, Delta T           Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display in Assigned Region         MAX, MIN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Display, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Multi-point Correction, Emissivity Table           Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided           Storage Device         SD card, Conforms to SDHC           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for RS00EX-Pro-D): SVX file(Avio original file)           Super Resolution (SN)         NA           SD Movie Recording         3 sec to 60 min interval, with Visible image recorded           Text Annotation         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup> Voice Recording         3 sec to 60 min interval, with Visible image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Video Output         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup>	age				ls			
Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAXMIN x 1 each, Delta T           Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display in Assigned Region         MAX, MIN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Display, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Multi-point Correction, Emissivity Table           Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided           Storage Device         SD card, Conforms to SDHC           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for RS00EX-Pro-D): SVX file(Avio original file)           Super Resolution (SN)         NA           SD Movie Recording         3 sec to 60 min interval, with Visible image recorded           Text Annotation         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup> Voice Recording         3 sec to 60 min interval, with Visible image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Video Output         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup>	Ď					) Picture-In-Picture (tr	ansparency changeable)	
Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAXMIN x 1 each, Delta T           Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display in Assigned Region         MAX, MIN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Display, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity Environmental/Background, Distance           Emissivity         Multi-point Correction, Emissivity Table           Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided           Storage Device         SD card, Conforms to SDHC           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for RS00EX-Pro-D): SVX file(Avio original file)           Super Resolution (SN)         NA           SD Movie Recording         3 sec to 60 min interval, with Visible image recorded           Text Annotation         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup> Voice Recording         3 sec to 60 min interval, with Visible image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Video Output         Annotate up to 128 Characters pera Thermal Image. Max imum transfer speed is 30H2) <sup>15</sup>	ispl							
Image Quality Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAX/MIN x 1 each, Delta T           Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display, Marm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Alarm Fisplay, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity, Environmental/Background, Distance           Emissivity         Multi-point Correction, Emissivity Table           Emissivity         Emissivity, Environmental/Background, Distance           Emissivity         Built point Correction, Emissivity Table           Emissivity         Multi-point Correction, Emissivity Table           Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided           Movie (noty for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Guick Panorama         Horizontal equivalent to 100" / Vertical equivalent to 75"           SD Gwee Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording         2 sec to 60 min interval, with Visible image. Characters imported from SD Card           Interval Recording         3 sec to 60 min interval, with Visible image. Max imum transfer s	ay							
Improvement         Denoising, Averaging (with ghost rejection), Edge enhancement           Point Temperature         10 Movable Points, Temperature search: MAX/MIN x 1 each, Delta T           Line Profile         Horizontal & Vertical, Horizontal & Vertical           Temperature Display in         MAX, MIN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Function         Alarm Display, Alarm Sound, Color Alarm, Alarm Recording, Alarm Signal Output         N/A           Temperature Correction         Emissivity, Environmental/Background, Distance           Emissivity         Multi-point Correction, Emissivity Table           Emissivity Reverse Calculation         N/A           Storage Device         SD card, Conforms to SDHC           Data Storage         Still Image: JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro-R500EX-Pro-D): SVX tile (Avio original file)           Super Resolution (SR)         Provided         N/A           Super Resolution (SR)         Provided         N/A           Vide Recording         Max 3Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image Corded         N/A           Video Output         Annotate up to 128 Characters pera Thermal Image         N/A           Video Output         NTAC / PAL Switchable         Alarm Annotate up to 128 Characters pera Thermal Image. Ma		In	nage Quality					
Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display in Assigned Region         MAX, MN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Function         Alarm Signal Output         N/A           Temperature Correction         Emissivity. Environmental/Background, Distance         N/A           Temperature Correction         Emissivity. Environmental/Background, Distance         N/A           Temperature Correction         Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         Data Storage           Storage Device         SD Card, Conforms to SDHC         Data Storage           Quick Panorama         Horizontal equivalent to 100 <sup>°</sup> / Vertical equivalent to 75 <sup>°</sup> SD Movie Recording         Max 3Hz         N/A           Unce Recording         3 sec to 80 min Interval, with Visible image recorded           External Trigger Recording         3 sec to 80 min Interval, with Visible image. Characters imported from SD Card           Interface         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Video Output         NTSC / PAL Switchable         N/A           Interface         Mass-Storage, Image transfer (Thermal Image with visible image. Max imu				Denoising, Averaging (with ghost rejection), Edge enhancement				
Line Profile         Horizontal, Vertical, Horizontal & Vertical           Temperature Display in Assigned Region         MAX, MN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Function         Alarm Signal Output         N/A           Temperature Correction         Emissivity. Environmental/Background, Distance         N/A           Temperature Correction         Emissivity. Environmental/Background, Distance         N/A           Temperature Correction         Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         Data Storage           Storage Device         SD Card, Conforms to SDHC         Data Storage           Quick Panorama         Horizontal equivalent to 100 <sup>°</sup> / Vertical equivalent to 75 <sup>°</sup> SD Movie Recording         Max 3Hz         N/A           Unce Recording         3 sec to 80 min Interval, with Visible image recorded           External Trigger Recording         3 sec to 80 min Interval, with Visible image. Characters imported from SD Card           Interface         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Video Output         NTSC / PAL Switchable         N/A           Interface         Mass-Storage, Image transfer (Thermal Image with visible image. Max imu		P	pint Temperature	10 Movable Points Temperature search: MAX/MIN x 1 each Delta T				
Temperature Display in Assigned Region         MAX, MIN and AVG in Box (for up to 5 Boxes)         N/A           Alarm Function         Alarm Signal Output         N/A           Alarm Function         Alarm Signal Output         N/A           Temperature Correction         Emissivity, Environmental/Background, Distance         N/A           Emissivity         Multi-point Correction, Emissivity Table         N/A           Emissivity         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/B500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100° / Vertical equivalent to 75°           SD Movie Recording         Max 3Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image         N/A           Voice Recording         30sec Recording, replay per a Thermal image         N/A           UB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz)*5           Video Output         NTSC / PAL Switchable         N/A           Automatic recording function by external trigger input         N/A	2	Li	ne Profile					
Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Maxa Ntz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interval Recording, Use Recording, replay per a Thermal Image. Characters imported from SD Card         Interface           Use 0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A	lea							
Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Maxa Ntz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interval Recording, Use Recording, replay per a Thermal Image. Characters imported from SD Card         Interface           Use 0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A	sur					N/A		
Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Maxa Ntz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interval Recording, Use Recording, replay per a Thermal Image. Characters imported from SD Card         Interface           Use 0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A	ing.	AI	arm Function	Alarm Display, Alarm S	ound, Color Alarm, Alarr	n Recording,		
Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Maxa Ntz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interval Recording, Use Recording, replay per a Thermal Image. Characters imported from SD Card         Interface           Use 0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A	2							
Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Maxa Ntz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interval Recording, Use Recording, replay per a Thermal Image. Characters imported from SD Card         Interface           Use 0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A	Inc	Te	emperature Correction		tal/Background, Distanc	e		
Emissivity Reverse Calculation         N/A           Drift Stabilizer         Provided         N/A           Storage Device         SD card, Conforms to SDHC         N/A           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided         N/A           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Maxa Ntz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interval Recording, Use Recording, replay per a Thermal Image. Characters imported from SD Card         Interface           Use 0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) <sup>15</sup> Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A	lör		Emissivity					
Storage Device         SD card, Conforms to SDHC           Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only tor R500EX-Pro-R500EX-Pro-D): SVX file(Avio original file)           Super Resolution (SR)         Provided           Quick Panorama         Horizontal equivalent to 100 <sup>o</sup> / Vertical equivalent to 75 <sup>o</sup> SD Movie Recording         Maxa Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded         N/A           External Trigger Recording, replay per a Thermal Image         N/A         Interval Recording           Voice Recording         3 sec to 60 min interval, with Visible image. Characters imported from SD Card         Interval Recording, replay per a Thermal Image           Intertace         Intertace         Intertace         Intertace           UsB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2)*5           Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Alarm Output         Contact Signal. No Voltage         N/A           Video Output         NTSC / PAL Switchable         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A <t< td=""><td>ร</td><td></td><td></td><td></td><td></td><td>N/A</td><td></td></t<>	ร					N/A		
Data Storage         Still Image : JPEG with temperature data (14 bit) Recorded with, Visible Image Movie (only tor R500EX-Pro D): SVX file (Avio original file)           Super Resolution (SR)         Provided           Quick Panorama         Horizontal equivalent to 100° / Vertical equivalent to 75°           Data Storage         M/A           Interval Recording         Max 3Hz           Voice Recording         Ass 2to 60 min interval, with Visible image recorded           External Trigger Recording         Provided           Voice Recording         30sec Recording, replay per a Thermal image           Text Annotation         Annotate up to 128 Characters pera Thermal Image. Characters imported from SD Card           Interface         Wideo Output           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2)*5           Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Automatic recording function by external trigger input         N/A           Display         3.5* LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           Operating Temperature & Humidity         -40*C to 70°C, 90%RH (non-condensing)           Sto			Drift Stabilizer	Provided		N/A		
Movie (only for R500EX-Pro/R500EX-Pro-D): SVX file (Avio original file)           Super Resolution (SR)         Provided           Quick Panorama         Horizontal equivalent to 100° / Vertical equivalent to 75°           SD Movie Recording         Max 3Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording         Provided         N/A           Voice Recording         30sec Recording, replay per a Thermal Image         N/A           Voice Recording         30sec Recording, replay per a Thermal Image. Characters imported from SD Card           Interface         Mass-Storage. Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5           Video Output         NTSC / PAL Switchable           Automatic recording function by external trigger input         N/A           Video Output         Contact Signal. No Voltage         N/A           Display         3.5° tCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         Auxiliary           Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller         -15° to 50° C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (30, 294m/sec² (30G)         EMd           EMM         Conforms to CE regulations (Class A)         Devar(TVB-CS01/7)*6		S	torage Device	SD card, Conforms to S	SDHC			
Super Resolution (SR)         Provided           Quick Panorama         Horizontal equivalent to 100' / Vertical equivalent to 75"           SD Movie Recording         Max 3Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded         N/A           External Trigger Recording         3 sec to 60 min interval, with Visible image recorded         N/A           Voice Recording         3 sec to 60 min interval, with Visible image recorded         N/A           Voice Recording         30sec Recording, replay per a Thermal image         Interval Recording to 128 Characters pera Thermal Image. Characters imported from SD Card           Interface         Interface         N/A         Video Output         NTSC / PAL Switchable           Video Output         NTSC / PAL Switchable         N/A         Video Output         NTSC / PAL Switchable           Atarm Output         Contact Signal. No Voitage         N/A         Video Output         N/A           Display         3.5" LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         Color View Finder           Vibration & Shock         29.4m/sec <sup>2</sup> (30, 294m/sec <sup>2</sup> (30G)         EMC         Controller           Storage Temperature & Humidity         -40°C to 70°C, 90%RH (non-condensing)         EMC         Contorms to CE regulations (Class A)		D	ata Storage					
Outick Panorama         Horizontal equivalent to 100° / Vertical equivalent to 75°           SD Movie Recording         Max 3Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded           External Trigger Recording         30 sec to 60 min interval, with Visible image recorded           Interval Recording         30 sec to 60 min interval, with Visible image           Voice Recording         30 sec to 60 min interval, with Visible image           Interface         N/A           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5           Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable           Alarm Output         Contact Signal. No Voltage           Display         3.5° LCD Monitor (with tilt adprightness adjustment), Color View Finder (with tilt adjustment)           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           Operating Temperature & Humidity         -40°C to 70°C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40°C to 70°C, 90%RH (non-condensing)           Battery Operation         2.5hock         29.4m/sec² (30,0)           EMC         Conforms to CE regulations (Class A)           Dust & splash proof <td></td> <td></td> <td></td> <td colspan="4"></td>								
SD Movie Recording         Max 3Hz         N/A           Interval Recording         3 sec to 60 min interval, with Visible image recorded         N/A           External Trigger Recording         30sec Recording, replay per a Thermal image         N/A           Voice Recording         30sec Recording, replay per a Thermal image         N/A           Voice Recording         30sec Recording, replay per a Thermal image         N/A           Voice Recording         30sec Recording, replay per a Thermal image         N/A           UsB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) *5           Automatic recording function by external trigger input         N/A           Video Output         Contact Signal. No Voltage         N/A           Automatic recording function by external trigger input         N/A           Display         3.5° tCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           -15° C to 5° C, 90% RH (non-condensing)         -40° C to 7° C, 90% RH (non-condensing)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3G)           EMM         Conforms to CE regulations (Class A)           Dust & splash proof         Protection class IP54 equivalent				Provided				
Interface           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5 Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           —	ស្ន			Horizontal equivalent to	o 100° / Vertical equivale	nt to 75°		
Interface           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5 Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           —	ora							
Interface           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5 Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           —	ge			3 sec to 60 min interval	, with Visible image reco	rded		
Interface           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5 Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           —	8					N/A		
Interface           USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30Hz) *5 Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           Display         3.5° LCD Monitor (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           —	L L L							
USB2.0         Mass-Storage, Image transfer (Thermal Image with visible image. Max imum transfer speed is 30H2) *5 Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           External Trigger Input         Pulse Signal         N/A           Auxiliary         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller         -15° C to 50° C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40° C to 70° C, 90%RH (non-condensing)         -40° C to 70° C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3G)         EMC           Dust & splash proof         Protection class IP54 equivalent         2.5hours (Typ), Rechargeable Li-to battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V - 220V AC, 50/60Hz         Dismensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)         Approx. 1.3sg (including Battery Pack)         -13% (including Battery Pack)	put			Annotate up to 128 Cha	aracters pera Thermal Im	nage. Characters import	ed from SD Card	
Automatic recording function by external trigger input         N/A           Video Output         NTSC / PAL Switchable         N/A           Alarm Output         Contact Signal. No Voltage         N/A           External Trigger Input         Pulse Signal         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller         -15°C to 50°C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40°C to 70°C, 90%RH (non-condensing)         -40°C to 70°C, 90%RH (non-condensing)           Battery Operation & Shock         29.4m/sec² (3G), 294m/sec² (3G)         EMC           Conforms to CE regulations (Class A)         Dust & splash proof         Protection class IP54 equivalent           Battery Operation         2.5hours (Typ), Rechargeable Li-lon battery, (75 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz         Dimensions           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)         Weight		In						
Video Output         NTSC / PAL Switchable           Alarm Output         Contact Signal. No Voltage         N/A           External Trigger Input         Pulse Signal         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         N/A           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller         -15° C to 50° C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40° C to 70° C, 90%RH (non-condensing)         -40° C to 70° C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3G)         -40° C to 70° C, 90%RH (non-condensing)           Ubit & splash proof         Protection class IPS4 equivalent         -40° C to 70° C, 90%RH (non-condensing)           Dust & splash proof         Protection class IPS4 equivalent         -40° C to 70° C, 90%RH (non-condensing)           Dust & splash proof         Protection class IPS4 equivalent         -40° C to 70° C, 90%RH (non-condensing)           Battery Operation         2.5hours (Typ), Rechargeable Li-Ion battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V - 220V AC, 50/60Hz         Dimensions           Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3sg (incl-duing Battery Pack)			USB2.0				n transfer speed is 30Hz) *5	
Alarm Output         Contact Signal. No Voltage         N/A           External Trigger Input         Pulse Signal         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)           Auxiliary         Laser Pointer (Red, class 2, comform to PSC regtation), LED Light, Remote Controller           -15°C to 50°C, 90%RH (non-condensing)         -15°C to 70°C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3G)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3G)           EMC         Conforms to CE regulations (Class A)           Dust & splash proof         Protection class IP54 equivalent           Ac Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)						N/A		
External Trigger Input         Pulse Signal         N/A           Display         3.5° LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)         Auxiliary           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           Operating Temperature & Humidity         -15°C to 50°C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40°C to 70°C, 90%RH (non-condensing)           EMC         Conforms to CE regulations (Class A)           Dust & splash proof         Protection class IP54 equivalent           Battery Operation         2.5hours (Typ), Rechargeable Li-lon battery, (75 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)								
Display         3.5" LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)           Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           Operating Temperature & Humidity         -15° C to 50° C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40° C to 70° C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3G0)           Dust & splash proof         Protection class IPS4 equivalent           Battery Operation         2.5hours (Typ), Rechargeable Li-Ion battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V - 220V AC, 50/60Hz           Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)					age			
Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           Image: Storage Temperature & Humidity         -15°C to 50°C, 90%RH (non-condensing)           Storage Temperature & Humidity         -40°C to 70°C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (3G), 294m/sec² (3GG)           EMC         Conforms to CE regulations (Class A)           Dust & splash proof         Protection class IP54 equivalent           Actery Operation         2.5hours (Typ), Rechargeable Li-to hattery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3sQ (including Battery Pack)								
Auxiliary         Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller           Operating Temperature 8 Humidity         -15°C to 50°C, 90%RH (non-condensing)           Storage Temperature 8 Humidity         -40°C to 70°C, 90%RH (non-condensing)           EMD         Conforms to C2 regulations (Class A)           Dust & splash proof         Protection class IP54 equivalent           Battery Operation         2.5hours (Typ), Rechargeable Li-lon battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)		D	isplay		tilt and brightness adjus	tment), Color View Find	er	
Operating Temperature & Humidity         -15°C to 50°C, 90%RH (non-condensing)           -15°C to 50°C, 90%RH (non-condensing)         -40°C to 70°C, 90%RH (non-condensing)           Vibration & Shock         29.4m/sec² (30G)           EMC         Conforms to CE regulations (Class A)           Dust & splash proof         Protection class IP54 equivalent           Battery Operation         2.5hours (Typ), Rechargeable Li-Ion battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V - 220V AC, 50/60Hz           Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.34g (including Battery Pack)								
i A Humidity     -15 C to 50 C, 90%HH (non-condensing)       Storage Temperature B Humidity     -40°C to 70°C, 90%HH (non-condensing)       Vibration & Shock     29.4m/sec² (3G), 294m/sec² (3GG)       Vibration & Shock     29.4m/sec² (3G), 294m/sec² (3GG)       EMC     Conforms to CE regulations (Class A)       Dust & splash proof     Protection class IP54 equivalent       Battery Operation     2.5hours (Typ), Rechargeable Li-lon battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6       AC Power     100V – 220V AC, 50/60Hz       Dimensions     Approx. H121mm×W105mm (excluding projection)       Weight     Approx. 1.3sQ (including Battery Pack)				Laser Pointer (Red, class 2, comform to PSC reglation), LED Light, Remote Controller				
Dots         Control of the synthesis prove equivalent           Battery Operation         2.5hours (Typ). Rechargeable Li-loo battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)		Ē		-15°C to 50°C, 90%RH (non-condensing)				
Dots         Control of the synthesis prove equivalent           Battery Operation         2.5hours (Typ). Rechargeable Li-loo battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)	ç	Dust & spiasi prooi		····· ··· ··· ··· ··· ··· ··· ··· ···				
Dots         Control of the synthesis prove equivalent           Battery Operation         2.5hours (Typ). Rechargeable Li-loo battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)	hei			-40°C to 70°C, 90%RH (non-condensing)				
Dots         Control of the synthesis prove equivalent           Battery Operation         2.5hours (Typ). Rechargeable Li-loo battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mmXW105mmXD195mm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)								
Dots         Control of the synthesis prove equivalent           Battery Operation         2.5hours (Typ). Rechargeable Li-loo battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121nm×W105nm×D195nm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)								
Dots         Control of the synthesis prove equivalent           Battery Operation         2.5hours (Typ). Rechargeable Li-loo battery, (7.5 hours with optional "Portable Power(TVB-C501)")*6           AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121nm×W105nm×D195nm (excluding projection)           Weight         Approx. 1.3sg (including Battery Pack)								
AC Power         100V – 220V AC, 50/60Hz           Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3kg (including Battery Pack)								
Dimensions         Approx. H121mm×W105mm×D195mm (excluding projection)           Weight         Approx. 1.3kg (including Battery Pack)								
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#### Options

**Specifications** 

Options		Model	Specification/remarks
	2x Telephoto Lens	IRL-TX02D	16° (H)×12° (V)
	2x Wide Angle Lens	IRL-WX02D	64° (H)×48° (V)
Lens	3x Wide Angle Lens	IRL-WX03D	93° (H)×73° (V)
	21µm Closeup Lens	IRL-C021UB20	13mm(H)×10mm(V), Working Distance 22mm
	52 µm Closeup Lens	IRL-C052UB	33mm(H)×25mm(V), Working Distance 56mm
	Rechargeable Battery Pack	T2UR18650F-5928	2500mAh Driving Hours: 2.5 Hours (typical)
A	Battery Charger	NC-LSC05-110V/220V	110v or 220v
Accessory	LCD Hood	IRU-F01A	
	Long time battery case	TVB-C501	Contains of 2 batteries. Battery not included

1 Only the Range 1 at the environmental temperature from 20 to 30°C (In other condition, it is ±2°C or ±2%.)
2 Still Image Only
3 This increased resolution results from detecting characteristic within all frames acquired by the SR process and removing such effects as those caused by hand vibration.
4 For temperature accuracy: 30cm to infinity
5 Thermal image only when image transfer speed at 30Hz
6 2 extra batteries (optional parts) are required for 7.5 hours operation.
7 In order to transfer Thermal image movie data by R500EX/R500EX-D, you need to upgrade to "InfReC Analyzer NS9500 Professional" (ontional software). (optional software)

#### **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.

Distributor: