

	Feature	R550Pro	R550Pro-D	R550	R550-D	
Basic Performance	Infrared Detector	Uncooled Focal Plane Array (Microbolometer)				
	Spectral Range	8 to 14 μ m				
	Measuring Range	-40 to 2000°C			-40 to 650°C	
	Sensitivity (NETD)	0.025°C at 30°C (with S/N improvement)				
	Accuracy	$\pm 1^\circ\text{C}^*1$				
	Frame Rate	30Hz / 60Hz ^{*2} / 120Hz ^{*3}		30Hz	7.5Hz	
	Detector Pixels	640(H)× 480(V) pixels				
	Recording Pixels	Standard mode : 640(H) × 480(V) , Super Resolution (SR mode) mode : 1280(H) × 960(V) ^{*4}				
	Field of View	32° (H) × 24° (V) (with standard lens)				
	Spatial Resolution	Standard mode : 0.87mrad , Super Resolution (SR mode) mode : 0.58mrad equivalent ^{*5}				
Focal Distance	10cm to infinity (with standard lens) ^{*6}					
Focus	Auto / Manual					
Image Display	Auto Function	Auto Scale, Auto Focus, Full Auto				
	Color Palettes	7 palettes (Rainbow, Brightness, Hot-white, Hot-black, etc.)				
	Gradation	256 / 32 / 16 / 8 grade				
	Visible Camera	CMOS camera 5M pixels				
	Visible/Thermal Fusion	Side-by-side, Fusion (transparency changeable) , Picture-In-Picture (transparency changeable)				
Measuring Functions	Display Functions	1 to 8 times continuous zoom (with display positioning scroll), Grid Overlay, 9 images multi-display (replay mode)				
	Image Quality Improvement	Denoising, Averaging (with ghost rejection), Edge enhancement				
	Point Temperature	10 Movable Points, Temperature search: MAX/MIN x 1 each, Delta T				
	Temperature Display in Assigned Region	MAX, MIN and AVG in BOX (Up to 5 boxes)		N/A		
	Line Profile	Horizontal, Vertical, Horizontal & Vertical				
	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		
	Drift Stabilizer	Yes		N/A		
Storage & Output	Storage Device	SD card, Conforms to SDHC				
	Data Format	Still image : JPEG with temperature data, 14bit (with visible image) Movie : SVX file (Dedicated format)				
	Data Storage	Still image (JPEG with temperature data, 14bit) , Recorded with visible image				
	Interface	Super Resolution (SR)	Yes			
		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	Yes		N/A	
		Voice Recording	30sec Recording, replay per a Thermal image			
		Text Annotation	Annotate up to 128 Characters per a Thermal Image. Characters imported from SD Card			
USB2.0		Mass Storage	Yes			
	Movie Data Transfer	Thermal image: Max : 30Hz, Recorded with visible image ^{*7}				
	Windowing Data Transfer	Thermal image				
		W1 : 640×240 W2 : 640×120	N/A			
	External Trigger Input	Automatic recording function by external trigger input			N/A	
	Video Output	NTSC / PAL Switchable				
Alarm Output	Contact Signal. No Voltage			N/A		
External Trigger Input	Pulse Signal			N/A		
Others	Display	3.5" LCD Monitor (with tilt and brightness adjustment), Color View Finder (with tilt adjustment)				
	Auxiliary	Laser Pointer (Red, class 2, IEC 60825-1 2007/2014), LED Light, Remote Controller				
	Environmental Resistance	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/sec ² (3G), 294m/sec ² (30G)				
	EMC	Conforms to CE regulations (Class A)				
	Dust & splash proof	Protection class IP54 equivalent				
	Battery Operation	2.5hours (Typ), Rechargeable Li-Ion battery				
	AC Power	100V – 220V AC, 50/60Hz				
	Dimensions	Approx. H121mm×W105mm×D195mm (excluding projection)				
Weight	Approx. 1.3kg (including Battery Pack)					
Standard Accessories	Wired remote Controller x 1, SD Card x 1, USB Cable x1, Neck Strap x 1, Grip Belt x 1, Rechargeable Li-Ion Battery x 1, Software x 1, Operation Manual x 1, and Carrying Case x 1					
Standard Software	InfReC Analyzer NS9500Professional		InfReC Analyzer NS9500Standard ^{*8}			

*1 Only the Range 1 at the environmental temperature from 20 to 30°C (In other condition, it is $\pm 2^\circ\text{C}$ or $\pm 2\%$.)
*2 Windowing Mode W1 (640×240) *3 Windowing Mode W2 (640×120) *4 Still Image Only
*5 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.
*6 For temperature accuracy : 30cm to infinity *7 Thermal Image only when image transfer speed at 30Hz
*8 In order to transfer thermal image movie data by R550 /R550-D, you need to upgrade to "InfReC Analyzer NS9500 Professional" (optional software).