

Software Functions	Details	Thermography Studio Professional Online (Build 5.1.0.886 Release Candidate)	Thermography Studio LIGHT
<b>Overview</b>			
<b>General specifications</b>			
<b>Camera Generations, File Formats</b>			
Analyzed Images, AVIO TVS 700, AVIO TVS100, AVIO TVS2000MK-I, AVIO TVS2000MK-II, AVIO TVS600, AVIO TVS200EX AVIO TVS500 (EX), AVIO TVS500EXZ, AVIO TVS8500, MS AVI, Collections, Comma Separated List, Drastic, E-Map, Gray Scale, NAIT F30,G30, NAIT H2630/40, NAIT TH7716, NEC TH71xx, NEC TH7716, NEC TH7800, NEC TH91xx, NEC TH9230/60, Xenics, Sofradir hotshot.			
<b>File Name Extensions</b>			
*.100, *.200, *.avi, *.bmp, *.clt, *.csv, *.eif, *.emf, *.gif, *.gs, *.gtsi, *.ird, *.iri, *.irs, *.irsu, *.is2, *.jpe, *.jpg, *.lsf, *.pgm, *.png, *.sit, *.six, *.svt, *.svx, *.tif, *.tiff, *.xif			
<b>Processing specifications</b>			
<b>File management functions</b>			
IR image preview	(local or network) - preview in open dialog, infrared, associated visual images, visual, fusion	+	+
Image search (local or network) in file menu	Search parameters: date, image type	(Filename)	(Filename)
Image save	TVS Native, *.clt, *.gtsi, *.irs, *.irsu	+	-
Image save as	TVS Native, *.clt, *.gtsi, *.irs, *.irsu	+	-
Collection save (local or network)	Store a collection of image settings for use on multiple images	+	-
Thermography Studio 4.8 compatibility	Import V4.8 .gtsi files	(No annotations, no fusion)	(No annotations, no fusion)
<b>Image processing / pattern setting functions</b>			
Temperature range adjustable	Preset, auto, custom, full, all frames preset	+	+
Isolines: single, multi	Three different colors, distance, interval and free band definition	+	-
Emissivity correction image		+	+
Ambient temperature correction		+	+
Temperatur offset		+	-
Averaging		+	-
Emissivity map		+	-
Adaptive emissivity correction (within objects)		+	-
Software filters	Averaging, median, subtraction, convolution, dilation, erosion, memory	+	-
Image composition	Compose 1 image out of 2	+	-
Image subtraction		+	-
Adjustable image view (contrast, brightness)		+	-
Reset image view (contrast, brightness)		-	-
Image rotate		+	-
Image flip		+	-
Reset original orientation		+	-
Link of multiple infrared images with multiple visual images	n-to-n IR sequences with visual	-	-
Link of single infrared image with multiple visual images	1-to-n	+	-
<b>Image export / Edit functions</b>			
Image print		+	+
Copy&Paste		+	+
Drag&Drop	Drag images/files from explorer drop images /files onto workspace (Word, Photo Editor)	+	+
Clip rectangular		+	-
Export JPEG		+	+
Export BMP		+	+
Export CSV (Excel)		+	-
Export TXT		+	-
Export EMF		+	-
MSO picture export	Free choice of elements (objects, format, statistic table, diagrams, ect.) for export	+	-
<b>Display Functions</b>			
Flexible for any numbers of thermal image pixels		+	+
Text annotation for objects		+	-
Temperature range of interest		+	+
Metadata within image info	Comments, date, time, range, scale, emissivity, ambient temperature	+	-
Image statistics		+	+
Image zoom - with scroll mouse and with "pull-down"	Up to 3000% plus view finder window	+	+
3D-View		+	-
Temperature unit selection (C, F, K)		+	+
Color palettes: 8 palettes	Free selection of scale: 16, 32, 64, 256 colors	+	+
Color palettes: invertable, animated		+	-
Object label		(Magnetic arrow unprecise for complex objects)	-
Show/hide menu/toolbars		+	+
Show/hide objects		+	+
Reset step by step and complete reset		+	<b>step by step</b>
Scroll-Mouse - programmed for all relative uses		+	+
Multiple document interface (MDI)	Single IR image, multiple preview images	(Single IR image, multiple preview images)	-
<b>Point analysis</b>			
Flying measurement spot		+	-
Measurement points		+	+

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Hot/cold spot detection - on total image and within objects		(No seek within area)	-
Measurement point statistics	Value, emissivity, ambient	+	+
Point temperature difference calculation		+	-
Point emissivity correction		+	-
Point ambient temperature correction		+	-
<b>Profile analysis</b>			
Max. no. of profiles	With moveable cursors, various scales, resizeable	+	+
Profile line - vertical		+	+
Profile line - horizontal		+	+
Profile line - diagonal		+	+
Profile line - polygonal		+	-
Profile line - cross line		+	-
Profile line statistics		+	+
Profile temperature difference calculation		+	-
Profile emissivity correction		+	-
Profile ambient temperature correction		+	-
Profile Scale/Size/Style adjustment		+	+
<b>Area analysis</b>			
Max. no. of areas (histogram)	With moveable cursors	+	+
Area histogram - rectangular		+	+
Area histogram - ellipse		+	+
Area histogram - circle		+	+
Area histogram - polygonal		+	-
Envelope Profile		+	-
Area statistics		+	+
Area temperature difference calculation		+	-
Area emissivity correction		+	-
Area ambient temperature correction		+	-
Area range of interest		+	-
Area Scale/Size/Style adjustment		+	+
<b>General point, profile and area analysis features</b>			
multiple selection of objects		+	-
Point, profile, area	Creating of statistic tables with differences	(Via copy&paste)	-
Profile, area	Two or three diagrams within one window	+	-
<b>Trend analysis</b>			
Point trend		+	-
Profile trend		+	-
Area trend		+	-
Box Line Trend		+	-
<b>Report functions</b>			
Available templates delivered	Easy modification by enduser	(One template)	-
MS Word Report, single/multipage	Active re-edit of created reports	+	-
MS Word template creation	Free choice of all MS-Word tools GTS elements	+	-
HTML Report, single/multipage		+	single
Report generation wizard		+	-
<b>Sequence functions GTS Professional</b>			
Sequence playback		+	-
Adjustable playback speed		+	-
Sequence export (AVI)		+	-
Sequence editor		+	-
Automatic sequence aggregation: thin out, average, maximum, minimum, median		+	-
Sequence statistics		+	-
Link of infrared sequences with visual sequences	n-to-n, IR sequences with visual	-	-
<b>Realtime and Sequence functions GTS Professional - Online</b>			
Realtime recording to disk	Up to 100fps depending on hardware	+	-
Realtime preview	Preview monitor allows camera configuration, focus, etc.	+	-
Adjustable memory buffer size		+	-
Storage in memory buffer		+	-
Adjustable recording speed		+	-
Start/stop trigger: immediate		+	-
Start/stop trigger: timeout		+	-
Start/stop trigger: external (COM)		+	-
Start/stop trigger: temperature		+	-
Start/stop trigger: screen button		+	-
Start/stop trigger: USB-trigger		+	-
Start/stop trigger: Windows message		-	-
Start/stop trigger: via SDK		-	-
Remote camera control	Push-button and console-type remote control support for various NEC-Avio cameras	+	-
Storage as sequence/single files		+	-
USB		(XenICs and some NEC/Avio)	-
IEEE		+	-
LAN		+	-
GIG-E/Camera-Link		-	-
<b>Other functions</b>			
Drawing		+	-
Rulers		+	-
		+	-
Ambient compensation	After input of humidity value/distance	-	-
Optic/Lens calculator	For documented hardware	+	-

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Radiation power calculation (within area)	Three formulas: Temperature only, with ambient temperature/emissivity correctio, with a/e correction and convection loss	+ (Radiation formula and calculation fixes)	-
Connecting infrared/visual image - taken from separate foto-camera	All supported bitmap formats (*.bmp, *.gif, *.jpg, *.jpeg, *.png, *.tiff, ...), automatically for matching filenames	+	-
Multilingual	Upgradable. Currently 11 Languages: English, Japanese, French, German, Italian, Korean, Spanish, Portuguese, Russian, Chinese (Traditional), Chinese (Simplified) in /Languages subdirectory of application	(ANSI codepage, no UNICODE)	(ANSI codepage, no UNICODE)
Manual, digital (english) under Help menu	Any (single) language Manual.pdf in /Help subdirectory of application	+	+
Manual, digital (english) context sensitive (F1)		(Shows default help document)	(Shows default help document)
Update check	Fully automatic or manual, from configurable server, spawns browser with file links of newer version available	+	+
Extended metadata format	Audio comment, text message, ...	-	-
Panorama/sequence assistant	Create IR panoramas from IR sequences	+ (No tilt/shift information from camera evaluated)	+
<b>Installer</b>			
Multilingual mode	11 Languages: English, Japanese, French, German, Italian, Korean, Spanish, Portuguese, Russian, Chinese (Traditional), Chinese (Simplified)	(ANSI codepage, no UNICODE)	+
Licensing, Branding	Software lock & user branding via license key, binding to user and/or hardware-ID, time-limited Teaser version	+	-

NOTE: GTS-PROFESSIONAL has the same functions as GTS-Professional-Online EXCEPT the realtime and sequence functions as per lines 119 through 138 (grey background)

GTS-LIGHT is delivered with all functions as per GTS-Professional-Online. After 90 days from initial installation it is automatically set back to the functions as per right end column.