

NEW

NEC

Infrared Thermal Imager Thermo Tracer TH7800N

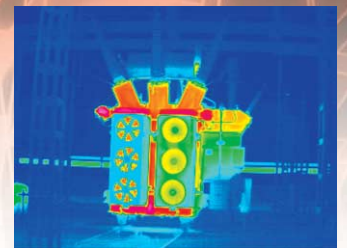
Affordable with High Performance



Laser pointer



Visual Image



Thermal Image

High quality image

320×240 pixel radiometric Uncooled Focal Plane Array equipped

Visual camera built in

Simultaneous storage of infrared and visual images in the same file

Flip-up 3.5 inch LCD

Adjustable for suitable angle to your eye position

Laser pointer

Shows measuring position

Easy to hold

Single hand control with either right or left hand

Operability

Operates for 2.5 hours with rechargeable battery

Large memory capacity

Stores 1000 images in the internal flash memory

Transfers images to PC via USB2.0

Available to read out image data on PC without turning on power of TH7800N as well as USB flash memory. (Mass storage mode)

Robust

Dust/splash-proof IP54
Shock 294m/s²(30G)
Vibration 29.4m/s²(3G)



NEC San-ei Instruments, Ltd.

Specifications

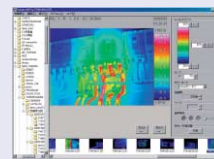
TH7800N	
Measuring range Range 1 Range 2	-20 to 250 _i C -20 to 100 _i C*1 0 to 250 _i C*2
Resolution	0.1 _i C(at 30 _i C,range1)
Accuracy	-2 _i C or -2% of reading whichever greater
Infrared Detector	Uncooled focal plane array (microbolometer)
Spectral range	8 to 14 m
I.F.O.V.	1.5mrad
Focusing range	50cm to infinity
Field of view	27.0 _i (H) x 20.0 _i (V)-5%
Frame time	60 frames/sec
Display	3.5 inch LCD monitor with auto switch
Thermal image pixels	320 (H) x 240 (V) pixels
A/D resolution	14 bits
Measuring functions	Run/Freeze S/N improvement OFF, 2, 8, 16 Spatial filter ON/OFF Alarm display (ON/OFF)
Emissivity correction	0.10 to 1.00 (at 0.01 step)
Environment temperature correction	Provided (including interval NUC)
Auto functions	Level trace, auto-gain control
Display functions	Display color : color/monochrome, positive/negative Gradation : 16, 32, 64, 128, 256 Color palette : rainbow, brightness, shine, hot-iron,medical, fine Isothermal display : max. 4 bands Battery monitor
Image processing	Variable level/sense Multi-point temperature display (4pts) Multi-point emissivity display (4pts) T display Max/Min (peak hold) temperature display Alarm (full screen or specified box) Digital zoom : 2, 4 times (Run/Freeze) Box setting (max. 5 boxes)
Image storage	1000 images on internal flash memory (Thermal image with Visual image)
Annotation	Text annotation available
Video signal output	NTSC/PAL, composite/S-video
Interface	USB2.0 (Mass storage mode)
Power saving	Stand-by, auto-shutdown
Visual camera	Detector: 0.41Mega pixels Image pixel: 752(H) x 480(V) pixels FOV:34.6 _i (H) x 25.9 _i (V) or larger Sensitivity: 1 lx Focusing range: 50cm to infinity Auto exposure: provided Video signal output: NTSC/PAL
Laser pointer	Class 2 (1mW/635nm red)
Operating temperature humidity	-15 to 45 _i C, 90% RH or less (not condensed)
Storage temperature humidity	-40 to 70 _i C, 90% RH or less (not condensed)
Power supply	AC adaptor: 100 to 240V AC, 7.2V DC
Shock & vibration	Shock: 294m/s ² (IEC60068-2-27), Vibration: 29.4m/s ² (IEC60068-2-6)
Environmental protection	IP54 (IEC60529)
Dimensions & weight	102(W) x 217(H) x 205(D) mm (excluding projections), 1.3kg (including battery)
Standard accessories	AC adaptor, battery pack (2pcs), battery charger, USB cable, lens cap, wrist strap, carrying case, viewer software, operation manual

Note : *1 Calibration range 0 to 100_iC, range other than the calibration range is theoretical value.
*2 Calibration range 0 to 250_iC, range other than the calibration range is theoretical value.

Applicable Software

Viewer Software TH78-719 (standard)

- Download thermal image from the internal memory to PC via USB2.0.
- Display thermal image thumbnail (Windows Explorer), thermal image replay, image preview and save or save as.
- Setup level, sense, span, color palette, gradation, page and new folder.
- Edit such as multi-point temperature display, multi-point emissivity display, and saving image in BMP, JPEG, or AVI.



Report Generator TH91-713 (optional)

- Making simple report with thermal image with temperature data on MS Word
- Replay thermal image, visual image and voice annotation and save or save as.
- Save in BMP or JPEG
- Setup level, sense, span, emissivity, page, color palette, gradation, multi-sense, isothermal band, cursor, box and waveform display, etc.
- Transfer temperature data to MS Excel
- Display max/min temperature in a box or full screen.

Image Processor TH91-711 (optional)

- Image Processor TH91-711 works on TH91-713
- Analyze thermal image and data with histogram, trend graph, multi-waveform, and max/min search, etc.
- Read zoom (x5), filtering, smoothing, emissivity correction, full screen subtraction, box subtraction and specified area subtraction

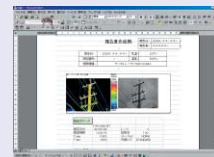
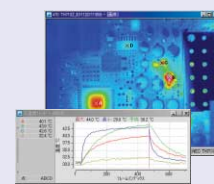


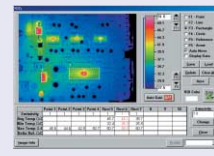
Image Processor Pro TH91-712 (optional)

- Stand alone professional image processing software
- 20 kinds of analytical functions such as temperature display, max/min temperature search, scale display and radiation thermal energy calculation, etc.
- Making multiple report and HTML report.



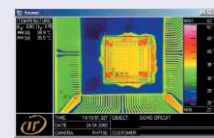
MikroSpec (optional)

- Thermal image processing and report writing software
- Temperature display in specifier area (max, min and average)
- Temperature difference between 2 points (t)
- 3 dimensional display and isothermal display
- Line profile
- Automatic report making with template

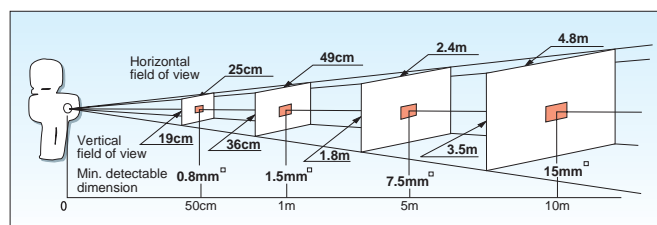


irMOTION TH91-757 (optional)

- Infrared image analyzing software.
- Free download for off line use.
- Viewing and evaluating of stored IR image.
- Measurement data quantitative studio cutting tools provided.
- Emissivity correction.
- File format converter(AVI,MPEG,BMP,PCX,TIFF, DRI,SVT,SIT).
- Data consistence to MS WINDOWS based application.



Field of View Diagram (Thermal image)



*Specifications subject to change without prior notice.



**CAUTION
FOR SAFETY**

Please read "WARNING" & "CAUTION" in the operation manual attached to the product carefully for proper operation before using the product.

NEC San-ei Instruments, Ltd.

1-25-12, Akebono-cho, Tachikawa-shi,
Tokyo 190-8537, Japan
Phone: +81-42-522-0529
Fax : +81-42-522-0538
E-mail: osd@necsan-ei.co.jp
Web : <http://www.necsan-ei.co.jp/osd/>

Distributor:

NEC

Catalog ref : 055

10605A3 Printed in Japan