

Infrared Thermal Imager

# Thermo Tracer TH5104R

**NEC**  
NEC San-ei

*Have a High Performance IR Camera at Affordable Price*

TH5104R can cope with cost effective continuous measurements by adapting the electronic cooling system.

- **Frame time 1/22sec at fast mode**
- **Display pixel number 255(H) x 223(V)**
- **Temperature resolution 0.1°C at 30°C**
- **Measuring range -10°C to 800°C as standard (optional range up to 1500°C)**
- **Easy measurement by full automatic function**  
Settings necessary for measurement (focus, level and sense) are automated to realize simple operation
- **Recording of measurement data by PC card**  
You can save the measurement data to an easy-to-carry PC card
- **Alarm function**  
When specified temperature is exceeded, it issues the alarm sound and let the measurer know as abnormality.
- **High performance measurement**
  - Multi-point temperature display can digitally display temperatures at up to 10 points
  - Multi-point emissivity correction can set emissivity at up to 10 points
  - Isothermal display shows the specific temperature zone in the color on the monochrome image
- **The built-in real time memory can save 64 images with selectable interval from 0 to 60minutes**
- **2 times optical zoom is built in**
- **Windows compatible optional software**

The Report Generator, the Image Processor and the Remote program which operate under the Windows environment are prepared as option. Measured data can be analyzed by PC and reports can readily be prepared.



## ◆ Specifications

TH5104R	
Temperature measuring range	Range 1:-10 to 200°C Range 2:100 to 800°C or 150 to 1500°C (option)
Temperature resolution (Range 1)	Normal mode:0.1°C(at 30°C) Fast mode:0.3°C(at 30°C)
Measuring accuracy	±1% (RFS)
Spectral range	3 to 5.3μm
Detector	HgCdTe (Thermoelectric cooling type)
Field of view	21.5°(H) x 21.5°(V)
IFOV	2.2mrad
Focal distance	30cm to infinity
Frame time	Normal mode: 0.65sec Fast mode 1:1/22sec(interpolation) Fast mode 2:1/22sec(interlace)
Optical zoom	X2(at normal mode only)
Real-time memory	64 images
Interval measurement	0 to 60 min
Number of pixel	255(H) x 223(V)
A/D resolution	12 bits
Environmental temp.correction	Provided
Emissivity correction	1.0 to 0.10 (0.01 step)
Operating temperature	0 to 40°C
Power supply	AC adapter 100 to 240VAC Battery pack 12VDC
Power Consumption	Approx. 20W
Dimensions	Approx.198(W) x 93(H) x 210(D)mm
Weight	Approx.2.5kg (except Battery Pack)
Standard accessories	Memory card Battery pack Battery charger AC Adapter Neck Strap Window protection cap Operation manual

## ◆ Functions

Auto-functions	Full automatic (Level, Sense, Focus)
Display functions	Color, Monochrome (positive/negative) 16,32,64,128, 256 grades Rainbow color, Brightness color, Isothermal band display (1 to 4 bands) Memo
Processing functions	Multi-point temperature (10 pts) Multi-point emissivity (10 pts) Alarm function
External I/O	GP-IB, Analog RGB, Video signal (NTSC/PAL)

## ◆ Options

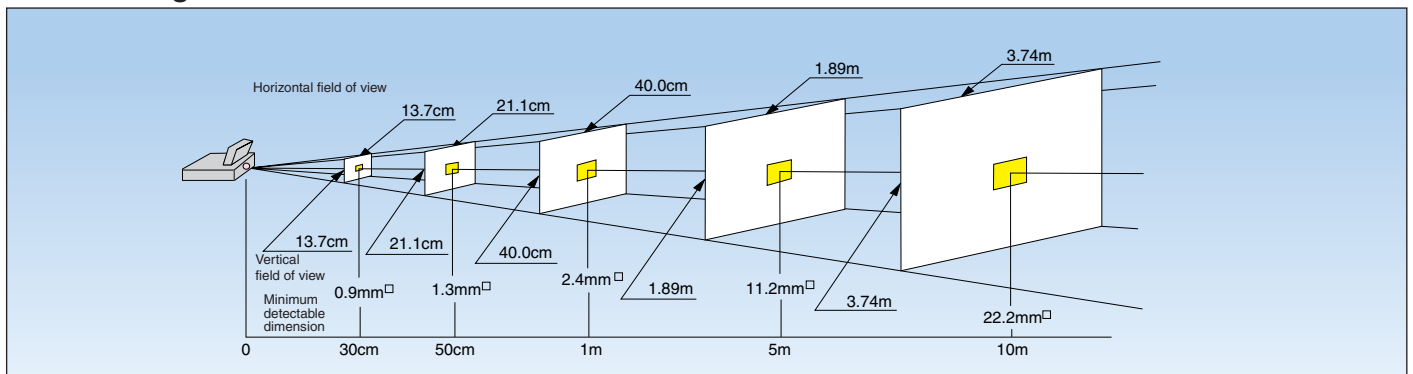
TH51-390	High temperature range 150 to 1500°C *1
TH51-391	High temperature range for glass surface 200 to 1500°C *1
TH51-392	High temperature range for passing through flame 200 to 1500°C *1
TH51-358	Battery pack (NiMH)
TH51-357	Battery charger for TH51-358 battery pack
TH51-343	AC adaptor (90 to 240VAC)
TH51-350	Hard carrying case
TH51-380	RGB cable for D-SUB 15 pin, 2m
TH51-381	RGB cable for D-SUB 25 pin, 2m
DP61-113	GP-IB cable
TH51-347	Telephoto lens (x2) 9.2°(H) x 9.2°(V)
TH51-348	Wide angle lens (x0.6) 35.8°(H) x 35.8°(V)
TH51-349	Wide angle lens (x0.3) 71.7°(H) x 71.7°(V)
TH51-377	Close-up lens (170μm) 21.5mm x 21.5mm
TH51-378	Close-up lens (85μm) 11.0mm x 11.0mm
SLIK-FVM	Tripod
TH51-708	GP-IB Remote Control Software *2
TH91-713	Report Generator Software *3
TH91-711	Image Processing Software *3
MikroSpec	Thermal Imaging Software *3

\*1 Specify these options when ordering the main unit (TH5104R)

\*2 Compatible with the Microsoft Windows 95/98/2000/XP

\*3 Compatible with the Microsoft Windows 2000 professional, Windows XP  
Specifications subject to change without prior notice.

## ◆ Measuring distance and field of view



### CAUTION FOR SAFETY

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

Please do not install the product in place of high temperature or humidity, a lot of water, dust or corrosive gas.

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# NEC

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