

Infrared Thermal Imager

# Thermo Tracer

## TH9100MV/WV

**NEC**  
NEC San-ei

NEW

### High Spec. and High Performance IR Thermal Imager

Newly developed  
high performance UFPA  
detector

**Superior  
Operation**

Joystick operation  
Full automatic function  
LCD display and View  
Finder

**Built-in Visual Camera**

Linked Thermal and Visual images for  
easy data storage, analysis and post  
processing

**Exceptional  
Performance**

Resolution : 0.06°C (at 30°C  
60Hz)

**Excellent Portability**

Lightweight : 1.3kg  
Battery life : approx. 2hrs30min

**Rugged Build Quality**

Dust and Splash Proof to IP54  
Vibration Proof : 29.4m/sec<sup>2</sup>  
Shock Proof : 294m/sec<sup>2</sup>

**High quality flip out LCD display**

Adapts to sun light reflection or low light conditions for  
easy operation



ISO14001  
JQA-EM0260



Accredited by the Dutch  
Council for Certification



JQA-1598  
ISO9001

## Specifications

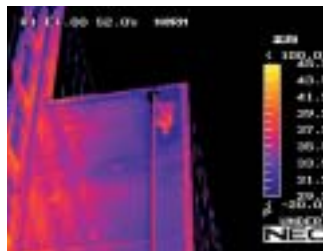
Measuring range	Range 1	TH9100MV -20 to 100°C	TH9100VW -40 to 120°C
	Range 2	0 to 250°C	0 to 500°C
	Range 3 (option)	100 to 800°C	200 to 2000°C
	Range 4 (option)	200 to 2000°C	—
	Resolution	0.06°C (at 30°C 60Hz) --- range 1	
Accuracy	±2°C or ±2% of reading		
Detector	Uncooled focal plane array (microbolometer)		
Spectral range	8 to 14μm		
I.F.O.V.	1.2mrad		
Focusing range	30cm to infinity		
Field of view	21.7°(H) x 16.4°(V)		
Frame time	60 frames/sec		
Display	View finder and 3.5 inch LCD monitor		
Thermal image pixels	320 (H) x 240 (V) pixels		
A/D resolution	14 bits		
Measuring functions	Run/Freeze		
S/N improvement	Σ2, Σ8, Σ16 and spatial filter ON/OFF		
Alarm	Screen display and alarm sound (ON/OFF)		
Interval measurement	Recording on memory card : 2 to 3600 sec interval Trigger function		
Emissivity correction	0.10 to 1.00 (at 0.01 step)		
Env. temp. correction	Provided (including interval NUC)		
User setup	Pre-registration of user setup (max. 10 setups)		
Background comp.	Provided		
Auto functions	Full automatic (level, sense, focus) Level trace, auto-gain control		
Display functions	Display color : color/monochrome, posi/nega Gradation : 8, 16, 32, 64, 128, 256 Color bar : rainbow, brightness, shine, hot-iron, medical Isothermal band display : max. 4 bands Multi image display : 12 thermal images replay Multi-sense display Line-profile : X, Y line profile (waveform display)		
Image processing functions	Variable level/sense Multi-point temperature display (10pts) Multi-point emissivity display (10pts) Δt 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)		
Annotation	Text and voice annotation (30 sec per image)		
Storage device	Compact flash memory card for; Thermal image in SIT or BMP file format Visible image in SIT, JPEG file format		
Movie recording	Real-time memory : 1664 images (max. 60Hz)		
Video signal output	NTSC/PAL composite video signal, S-video		
Interface	IEEE1394, RS-232C		
Operating temp/humidity	-15 to 50°C, 90% RH or less (not condensed)		
Storage temp./humidity	-40 to 70°C, 90% RH or less (not condensed)		
Power supply	AC adaptor : 100V to 240V, DC 7.2V (nominal)		
Power consumption	Approx. 6W (typ)		
Shock and vibration	294m/sec <sup>2</sup> (IEC60068-2-27), 29.4m/sec <sup>2</sup> (IEC60068-2-6)		
Environmental protection	IP54 (IEC60529)		
Dimensions	Approx. 108 (W) x 113 (H) x 189 (D) mm (excluding projection)		
Weight	Approx. 1.3kg (excluding battery and LCD) Approx. 1.6kg (including battery and LCD)		
Standard accessories	AC adaptor, battery pack (2pcs), battery charger, compact flash memory card, grid belt, neck strap, lens cap, carrying case, viewer software, operation manual		

Specifications are subject to change without prior notice.

## <Visual Camera>

Pixels	0.41Mega pixels
Effective image pixels	752 (H) x 480 (V) pixels
Field of view	25.9° (H) x 19.4° (V)
Sensitivity	1 lux
Focusing distance	30cm to infinity
Auto exposure	Provided
Video signal	NTSC

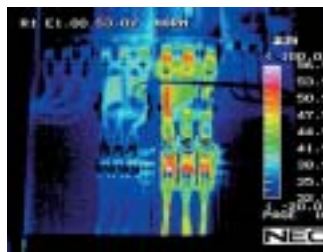
## Example Images



Thermal image (brightness palette)



Visual image

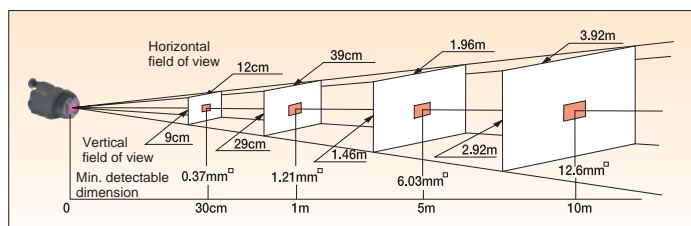


Thermal image

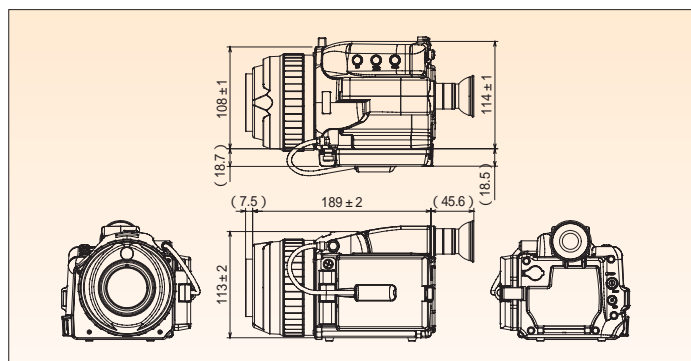


Visual image

## Field of View Diagram (Thermal image)



## Dimensions



**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](mailto:osd@necsan-ei.co.jp)  
Web : <http://www.necsan-ei.co.jp/osd/>

Distributor:

**NEC**

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