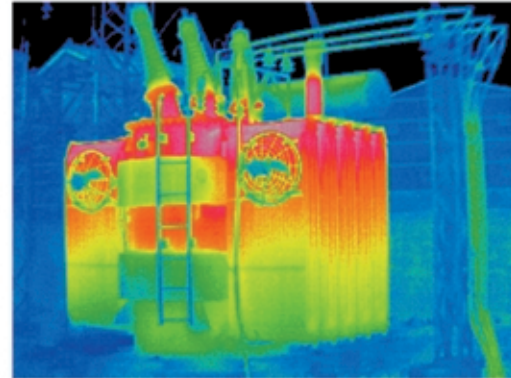


Fixed Installation Type  
Infrared Thermal Imager

# Thermo Tracer TS7302

**NEC**  
NEC San-ei



The Thermo Tracer TS7302 is a fixed installation type infrared thermal imaging camera to monitor important facilities such as production lines, electric power facilities, petrochemical plants and public institutions, etc. by thermal image remotely, and detects abnormal temperature so as to prevent serious damage and losses due to accidents.

Temperature measuring range selectable from following two ranges,

W range: -40 to 500°C (200 to 2000°C as option)

M range: -20 to 250°C (100 to 800°C and 200 to 2000°C as option)

## Applications

- **Production line monitoring**  
Quality anomalies in production processes
- **Facility monitoring**  
Anomalies in electric power, petrochemical plant facilities
- **Intruder monitoring**  
Important facilities (nuclear power, harbor, airport, dam, river, water purification plant, etc.)
- **Fire monitoring**  
Important facilities, wide-range area
- **Environment monitoring**  
Volcano, ecology, vegetation, global warming, pollution
- **R&D**  
Evaluation, observation, analysis, survey, risk management

## FEATURES

### <Remote monitoring by LAN>

- Remote-controlling the infrared camera through the built-in LAN interface (option), to grasp site conditions wherever
- Realizing unmanned operation by concentric monitoring using multiple cameras
- Selection of the transmission method in combination with other equipment to establish a system matching the site needs

### <Usable even under severe environments>

- The camera can be contained in a environment resisting case or a all-weather housing.

### <Realtime thermal image transfer>

- Realtime thermal image measurement using the built-in IEEE1394 interface (option)
- Can extend up to 500m using the special repeater.

### <Low running cost>

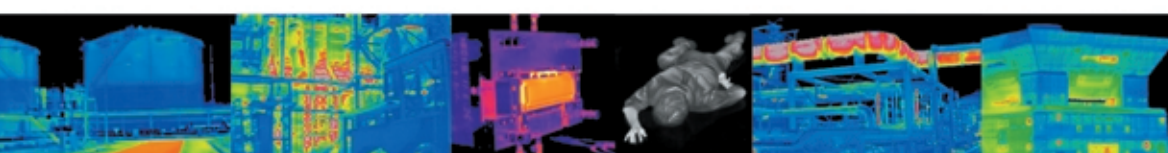
- Adoption of the uncooled focal plane array detector needs no coolant nor requires the high maintenance cost.

### <High-precision measurement>

- Minimum detectable temperature resolution: 0.08°C (at 30°C)
- Measuring accuracy: ±2% R.F.S

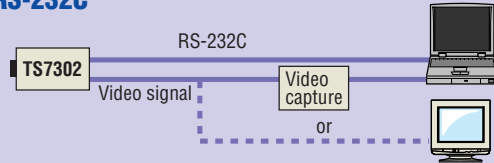
### <Rich lineup of options>

- Various types of lenses, interfaces, housings, etc. are prepared to build up the system meeting individual needs.



## Basic System Configuration

### 1. RS-232C



- Can control the infrared camera from the PC.
- Infrared camera images can be monitored on the PC screen by the video capture
- Infrared camera images can also be monitored on TV.

### 2. LAN (option)



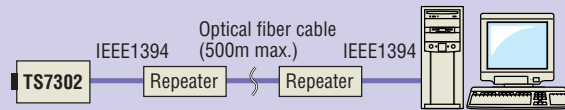
- Can judge temperature anomalies by the infrared camera.
- Using a repeater, the infrared camera can be separated from the PC.

- Can control the infrared camera from the PC and monitor infrared camera images on the PC screen.
- When a temperature anomaly is detected by the infrared camera, the alarm display is shown on the PC screen.
- Connecting multiple infrared cameras and controlling individually.

### 3. IEEE1394 (option)



- Can control the infrared camera from the PC.
- Can transfer data of the infrared camera in realtime.
- Images can be saved in realtime and can be reproduced later for checking.



- Using the special repeater, the infrared camera can be separated up to 500m from the PC.

## Specifications

Measuring temperature range	M-range	W-range	Auto function:	Focus, level, sensitivity
Range 1	-20°C to 100°C	-40°C to 120°C	Video output	• NTSC/PAL composite video signal • S video signal
Range 2	0°C to 250°C	0°C to 500°C	Interface	• RS-232C • IEEE1394 (option) • LAN (option)
Option	TS73-390 (100°C to 2000°C)	TS73-392 (200°C to 2000°C)		
Resolution	0.08°C (Normal mode, Range 1)		Storage temperature & humidity	-40°C to 70°C, 90%RH or less (not condensed)
Measuring accuracy	±2% (Range full scale)		Power supply	AC adaptor: 100V to 240V AC DC power supply: 12V (nominal)
Spectral range	8 to 14µm		Power consumption	Approx. 5W
Detector	Uncooled focal plane array detector		Dimensions	Approx. 101(W)x113(H)x160(D)mm (excluding projections)
Field of view	29°(H) x 22°(V)		Weight	Approx. 1.2kg
Instantaneous F.O.V.	1.58mrad		Standard accessory	• AC adaptor • Lens protective cap • Operation Manual
Focusing range	50 cm to infinity			
Frame time	1/7.5, 1/30, 1/60 sec.			
Image pixels	320 (H) x 240 (V)			
A/D resolution	14 bits			
Env. temp. correction	Provided (CAL/NUC)			
Emissivity correction	1.00 to 0.10 (at 0.01 step)			

## Options

Lens		Display	
Telephoto lens (x2)	TH71-343A	LCD remote control	TH71-347
Telephoto lens (x3)	TH71-380	Interface	
Zoom lens (x2-x6.5)	Upon order	IEEE1394 interface (w/data capture program)	TS73-452
Wide angle lens (55°)	TH71-344A	LAN interface (w/remote control program)	Upon order
Close-up lens (100µm)	TH71-377	Remote control software (RS-232C)	Upon order
Close-up lens (50µm)	TH71-378	Housing	
Close-up lens (25µm)	Upon order	Environment resisting housing	Upon order
		All-weather housing	Upon order



### CAUTION FOR SAFETY

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

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