HIOKI

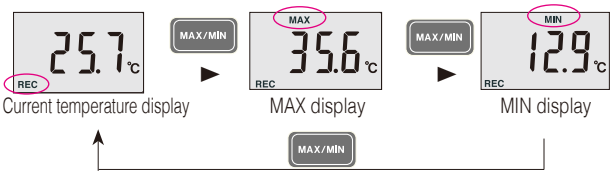
TEMPERATURE HiTESTER
3441, 3442

Wide Measurement Range from -100°C to 1300°C*

■ 3441/3442 Extended Operation, Max/Min Temperature Recording, Water-resistant Construction (3442 only)

- The 3442 has a water-resistant construction.
- Measurement in damp environments is possible by using the thermometer in combination with the 9472 or 9475 temperature probe. (-100˚C to 1300˚C)*
- Choose from 9 different temperature probes (optional), according to your application.

- Recording of maximum temperature and minimum temperature



Current temperature display — MAX display — MIN display

The 3441 and 3442 support temperature management by recording maximum and minimum temperatures in memory. By pressing the MAX/MIN key, you can switch to display of the current maximum and minimum temperatures at any time.

* Measurable temperature range varies according to temperature sensor type.

CE 3 year Guarantee

■ 3441/ 3442 Specifications (Accuracy guaranteed for 6 months, Post-adjustment accuracy guaranteed for 6 months/ Accuracy at 23˚C ±5˚C, 80% rh or less)

Measurement sensor : Type K thermocouple
Measurement range : -100˚C to 1300˚C (-148˚F to 2372˚F)
Resolution : 0.1˚C (100.0 to 199. 9˚C), 1˚C (200 to 1300˚C)/
0.1˚F (-148˚F to 392˚F), 1˚F (393˚F to 2372˚F)
Accuracy (Period of guaranteed accuracy:6 months) : ±0.1% rdg. ±0.8˚C (from -100.0 to 199.9˚C)/
±0.1% rdg. ±1.4˚F (-148˚F to 392˚F)
±0.2% rdg. ±1˚C (from 200 to 1300˚C)/
±0.2% rdg. ±1.8˚F (393˚F to 2372˚F)
(Accuracy of temperature sensor is added.)
Temperature coefficient : 0.03˚C/˚C (from -100.0 to 199.9˚C) / 0.05˚F/˚F (-148˚F to 392˚F)
0.05˚C/˚C (from 200 to 1300˚C) / 0.09˚F/˚F (393˚F to 2372˚F)
Sampling rate : 2 / second
Display : LCD display
Reference contact compensation : Automatic
Functions : Max/Min temperature recording and display, display data hold, sensor discontinuity display (- - - -), over-range display (O.F, - O.F), auto power save (operates after 30 min, can be disabled), low battery warning

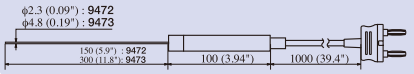
Operating environment : Indoors, at altitude up to 2000 m
Ambient conditions
for use : 0 to 40˚C (32˚F to 104˚F), 80% rh or less (non-condensating)
for storage : -10 to 50˚C (14˚F to 122˚F), 80% rh or less (non-condensating)
Applicable standards : Safety, EN61010, Pollution level 2
EMC, EN61326
Water resistance: IP54 (EN60529)
Power supply : LR6 alkaline battery × 4
R6P manganese battery × 4
Maximum rated power : 35 mVA
Continuous operating time : 200 hours or more (using manganese batteries)
Dimensions and mass : Approx. 74(W) × 155(H) × 24(D) mm (2.91×6.10×0.94 in), approx. 160g (5.6 oz) (not including batteries or probe)
Accessories : R6P manganese battery × 4, Strap band, Instruction manual

■ Choose from a wide range of temperature sensors for various applications (optional)

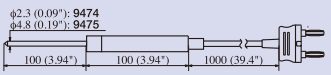
■ TEMPERATURE PROBE for 3441 / 3442 ●:water--resistant structure

unit=mm (inch)

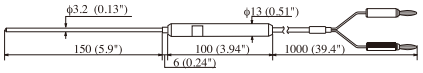
9472 / 9473 SHEATH TYPE



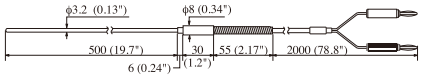
9474 / 9475 SHEATH TYPE



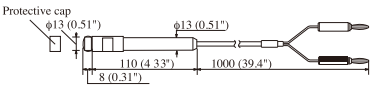
9180 / 9183 SHEATH TYPE



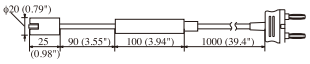
9182 SHEATH TYPE



9181 SURFACE TYPE



9476 SURFACE TYPE



■ Probe specifications (9472, 9473, 9474, 9475: Waterproof construction)

Model	9472	9473	9474	9475	9476
Material type	K type thermocouple (Chromel / Almel)				
Contact type	Non-grounded	Non-grounded	Non-grounded	Non-grounded	Grounded
Tolerance	*2				*3
Response (90%)*1	About 5 sec	About 10 sec	About 5 sec	About 10 sec	About 3 sec
Size of Sheath (mm), (inch)	φ 2.3 × 150 (mm) φ 0.09 × 5.91 (in)	φ 4.8 × 300 (mm) φ 0.19 × 11.81 (in)	φ 2.3 × 100 (mm) φ 0.09 × 3.94 (in)	φ 4.8 × 100 (mm) φ 0.19 × 3.94 (in)	φ 20 (mm) φ 0.79 (in)
Compensation lead	Conventional type (-20 to 90˚C, -4 to 194˚F), 1m (3.28 ft)				
Grip heat resistance	80 ˚C (176 ˚F)				
Measurement temperature	−100 to 300˚C −148 to 572˚F	0 to 800˚C 32 to 1472˚F	−100 to 300˚C −148 to 572˚F	−100 to 500˚C −148 to 932˚F	−40 to 500˚C −40 to 932˚F

*1 Sheath type: Responsiveness in ice water at 0°C (32°F) and in boiling water at 100°C (212°F)
Surface type: Responsiveness on a metal surface at 0°C (32°F) and at 100°C (212°F)
*2 At -40°C (-40°F) and more , the greater of ±1.5°C (±2.7°F) and ±0.4 % of the measured value
*3 ±2.5°C [(T-Ts) ≤ 100°C], -0.03 × T°C to +2.5°C [100°C < (T-Ts)],
T : measured temperature (-40°C to 500°C), Ts : environmental temperature (0°C to 40°C)

Due to short range ordering, type K thermocouples exhibit increased thermal electromotive force when used to measure temperatures from 250°C to 600°C.

■ Probe specifications

Model	9180, 9183	9181	9182
Material type	K type thermocouple (Chromel / Almel)		
Contact type	Non-grounded	Grounded	Non-grounded
Tolerance	9180 : *4 9183 : *2	±2.5 ˚C (±4.5 ˚F) [(T-Ts) ≤ 100 ˚C (180 ˚F)] −0.035×T ˚C to +2.5 ˚C [100 ˚C (180 ˚F) < (T-Ts)] T: measurement temp. (-50°C to 400°C) Ts: environment temp. (0°C to 50°C)	*4
Response (90%)*1	About 5 sec	About 3 sec	About 5 sec
Size of Sheath (mm), (inch)	φ 3.2 × 150 (mm) φ 0.13 × 5.91 (in)	φ 13 (mm) φ 0.51 (in)	φ 3.2 × 500 (mm) φ 0.13 × 19.69 (in)
Compensation lead	Conventional type (-20 to 90˚C, -4 to 194˚F), 1m (3.28 ft)		Heat resisting type (0 to 150˚C, 32 to 302˚F) 2m (6.56 ft)
Grip heat resistance	150°C (302°F), Grip size φ 13 × 100 mm (φ0.51 in × 3.94 in)		90°C (194°F), clamp size φ 8 × 30 mm (φ 0.31 × 1.18 in)
Measurement temperature	−50 to 750°C −58 to 1382°F	−50 to 400°C −58 to 752°F	−50 to 750°C −58 to 1382°F

*1 Sheath type: Responsiveness in ice water at 0°C (32°F) and in boiling water at 100°C (212°F)
Surface type: Responsiveness on a metal surface at 0°C (32°F) and at 100°C (212°F)
*2 At -40°C (-40°F) and more , the greater of ±1.5°C (±2.7°F) and ±0.4 % of the measured value
*4 At -40°C (-40°F) and more , the greater of ±2.5°C (±4.5°F) and ±0.75% of the measured value

TEMPERATURE HiTESTER

These products cannot perform measurement alone.
Please purchase a temperature probe separately.

Model No.	(Order Code)	(Note)
3441	3441	(˚C only)
	3441-02	(˚C/ ˚F selectable)
3442	3442	(˚C only, Waterproof construction)

■ Options for 3441(-02), 3442

SHEATH TYPE TEMPERATURE PROBE	9180
SURFACE TYPE TEMPERATURE PROBE	9181
SHEATH TYPE TEMPERATURE PROBE	9182
SHEATH TYPE TEMPERATURE PROBE	9183
SHEATH TYPE TEMPERATURE PROBE	9472
SHEATH TYPE TEMPERATURE PROBE	9473
SHEATH TYPE TEMPERATURE PROBE	9474
SHEATH TYPE TEMPERATURE PROBE	9475
SURFACE TYPE TEMPERATURE PROBE	9476
CARRYING CASE	9386-01

Note: Company names and Product names appearing in this catalog are trademarks or registered trademarks of various companies.

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