

Infrared Thermometer Terminology

Noncontact IR thermometers determine temperature using thermal radiation from the object(s) being tested.

Focus Spot Size and Distance—

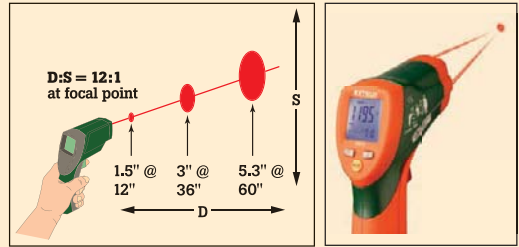
Indicates the diameter measured at a given distance from the object. For example, 1" @ 12" indicates that a thermometer focuses on a 1"-dia. spot 12" from the thermometer.

Emissivity—A surface's ability to give off infrared radiation relative to a black body, which theoretically emits at 100% or 1.0. Material and surface texture affect

emissivity. For example, a given polished metal may have an emissivity value of 0.20 and wood a value of 0.95. IR thermometer selection may consider whether a surface/immersion probe is required for adjustments to emissivity.

1-Dot Laser Sighting—A laser pointer identifies the target area.

2-Dot/Convergence/Dual Laser Sighting—2 lasers converge to a single point; a 1"-dia. around that point is the measurement area.



Focus Spot Size and Distance

Convergence



1VEP7



1VER1



34D332



49Z259



Pocket-Style Infrared Thermometers

General purpose thermometers show readings on LCDs. Pocket-size portability makes it easy to take and use thermometers anywhere.

Focus Spot Size and Distance	Temp. Range (F)	Temp. Accuracy (F)	Emissivity	Includes	Laser Sighting	Data Hold	Battery Type	Brand	Mfr. Model	Item No.
Infrared Thermometer										
1 in @ 1 in	-67° to 428°	+/-2.0% or +/-4.0° Whichever is Greater	0.95 fixed	Battery and Neck Lanyard	Single Dot	N/A	CR2032	Westward	1VEP7	1VEP7
1 in @ 1 in	-28° to 230°	+/-2.5% of Reading or +/-4.5° Whichever is Greater	0.95 fixed	Battery and Wrist Strap	Single Dot	Yes	LR44	Westward	1VER1	1VER1
1 in @ 6 in	-20° to 932°	+/-2.0% of Reading or +/-4.0° Whichever is Greater	Adjustable 0.10 to 1.00	Battery and Wrist Strap	Single Dot	Yes	AAA	Westward	54TZ28	54TZ28
1 in @ 8 in	-20° to 932°	+/-4.0° at 70.0° Nominal	0.95 fixed	Probe, Users Manual	Single Dot	Yes	AAA	Amprobe	IR-450	34D332
1 in @ 10 in	-22° to 482°	+/-1.5% of Reading or +/-2.7° From 32.0 to 482.0° +/-3.6° From -4.0° to 32.0°, +/-4.5° From -22.0° to -4°	Adjustable 0.10 to 1.00	Wrist Strap, Batteries, Certificate of Calibration	Circular	Yes	(3) AAA	Testo	0560 1805 01	49Z259
Accessory										
Nylon Thermometer Pouch, Use with 2ZB46, 1VEP6, and 1VEP9								Westward	1VEP3	1VEP3



NIST Certified Infrared Thermometers

Easy-to-read LCDs quickly provide temperature readings.



6RGK8



49VU04



45PF92

Focus Spot Size and Distance	Temp. Range (F)	Temp. Accuracy (F)	Emissivity	Includes	Laser Sighting	Battery Type	Data Hold	Calibration Certificate	Mfr. Model	Item No.
Extech										
1 in @ 12 in	-58° to 1200°	+/-1.0% of Reading +2.0°	Adjustable 0.10 to 1.00	Battery and Pouch Case	Single Dot	9V	Yes	NIST	42510A-NIST	2LV2
1 in @ 12 in	-4° to 1202°	+/-1.0% of Reading +2.0°	Adjustable 0.10 to 1.00	Battery, Case	Single Dot	9V	Yes	—	IR270-NIST	55EP29
1 in @ 30 in	-58° to 1832°	+/-4.5°	Adjustable 0.10 to 1.00	Instructions, Pouch Case, Battery	Convergence	9V	Yes	NIST	42512-NIST	6RGK8
1 in @ 50 in	-58° to 1832°	±2.0% of Reading	Adjustable 0.10 to 1.00	Battery and Carrying Case	Single Dot	9V	Yes	NIST	42545-NIST	2LV6
1 in @ 50 in	-58° to 3992°	±1.0% of Reading	Adjustable 0.10 to 1.00	Type K Temperature Probe, USB Cable and Software, Carrying Case, Tripod, Battery and Instructions	Convergence	9V	Yes	NIST	42570-NIST	4TXH7
FLIR										
1 in @ 24 in	-22° to 1202°	±1.0% of Reading	(4) Presets 0.65, 0.75, 0.85, 0.95 and Adjustable From 0.10 to 0.99	Wrist Strap Lanyard, Quick Start Guide, User Manual/CD, Batteries	Single Dot	AAA	Yes	NIST	TG54-NIST	49VU04
1 in @ 30 in	-22° to 1202°	±1.0% of Reading	(4) Presets 0.65, 0.75, 0.85, 0.95 and Adjustable From 0.10 to 0.99	Wrist Strap Lanyard, Quick Start Guide, User Manual/CD, Type K General Purpose Probe, Batteries	Single Dot	AAA	Yes	NIST	TG56-NIST	49VU05
Milwaukee										
1 in @ 10 in	-22° to 752°	±2.0%	0.95 fixed	(1) 9V Battery, Manual, NIST Certification	Single Dot	9V	Yes	Yes	2267-20NST	45PF90
1 in @ 12 in	-22° to 1022°	±1.8%	0.95 fixed	(1) 9V Battery, Manual, NIST Certification	Single Dot	9V	Yes	Yes	2268-20NST	45PF92
1 in @ 12 in	-22° to 1022°	±1.8%	0.95 fixed	Manual and NIST Certification	Single Dot	M12	Yes	Yes	2278-20NST	45PF96
1 in @ 30 in	-40° to 1472°	±2.0%	Adjustable 0.10 to 0.99	(1) 9V Battery, Manual, K-Type Thermocouple, NIST Certification	Single Dot	9V	Yes	Yes	2269-20NST	45PF94
UEI Test Instruments										
1 in @ 12 in	-76° to 1022°	+/-2.0% or +/-4.0° Whichever is Greater	Adjustable 0.30, 0.70, 0.95	Holster, (2) AAA Batteries	Circular	AAA	Yes	NIST	INF195C-N	49EL82