



INFRARED THERMOMETERS – 2015



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IRT850K
50:1 Ultra Wide-Range IRT
with "K" Port
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IRT855DL
50:1 Ultra Wide-Range
Data Logging IRT with "K" Port
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IRTC40
8:1 Scanning IRT
with Tricolor LCD
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INFRARED THERMOMETERS

Government-compliant IRTs

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IRT650
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IRT670
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IRT850K
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IRT500DL
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IRT675
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IRT5000
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SPECIFICATIONS

D:S Ratio Model No.	8:1 IRT206	12:1 IRT650	30:1 IRT670	30:1 IRT850K	50:1 IRT500DL	50:1 IRT675	100:1 IRT5000
Name	8:1 Mid-Range IR Thermometer	12:1 Wide-Range IR Thermometer	30:1 Ultra Wide-Range IR Thermometer	50:1 Ultra Wide-Range IR Thermometer with “K” Port	50:1 Data Logging Ultra Wide-Range IR Thermometer with “K” Port	50:1 Ultra Wide-Range IR Thermometer	100:1 Ultra-High Temperature IR Thermometer with Dual Laser Target Tracking System and “K” Port
Temperature Measurement Range	-4° to 608°F (-20° to 320°C)	-26° to 999°F (-32° to 535°C)	-26° to 1400°F (-32° to 760°C)	-76° to 2732°F (-60° to 1500°C) for IRT; -83° to 2552°F (-64° to 1400°C) for “K” port	-58° to 1832°F (-50° to 1000°C)	-26° to 2372°F (-32° to 1300°C)	392° to 4352°F (200° to 2400°C)
Resolution	0.1°	0.1°	0.1° below 1000°	0.1° below 1000°	0.1° below 1000°	0.1° below 1000°	0.1° below 1000°
Accuracy	±2% of reading or ±3.6°F/±2°C (whichever is greater)	±5.4°F (±3°C) from -26° to -4°F (-32° to -20°C); ±3.6°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2% from 212° to 999°F (100° to 535°C)	±5.4°F (±3°C) from -26° to -4°F (-32° to -20°C); ±3.6°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2% from 212° to 1400°F (100° to 760°C)	±1.8°F (1°C) from 59° to 95°F (15° to 35°C); ±2% of reading or 3.6°F (2°C), whichever is greater, from -27° to 59°F (-33° to 15°C) and from 95° to 2732°F (35° to 1500°C)	±5.4°F (3°C) from -58° to -4°F (-50° to -20°C); ±3.6°F (2°C) from -4° to 212°F (-20° to 100°C); ±2% of reading from 212° to 1832°F (100° to 1000°C)	±5.4°F (±3°C) from -26° to -4°F (-32° to -20°C); ±3.6°F (±2°C) from -4° to 212°F (-20° to 100°C) ±2% from 212° to 2372°F (100° to 1300°C)	±2% of reading
Emissivity	Fixed at 0.95	Fixed at 0.95	Adjustable from 0.1 to 1.0 in 0.01 steps	Adjustable from 0.1 to 1.0 in 0.01 steps	Adjustable from 0.1 to 1.0 in 0.01 steps	Adjustable from 0.1 to 1.0 in 0.01 steps	Adjustable from 0.1 to 1.0 in 0.01 steps
Display	Backlit LCD	Backlit LCD	Backlit LCD	Backlit LCD	LCD	Backlit LCD	Backlit LCD
Laser Power	<1mW (Class 2)	<1mW (Class 2)	<1mW (Class 2)	<1mW (Class 2)	<1mW (Class 2)	<1mW (Class 2)	<1mW (Class 2)
Other Key Features	Data Hold	°F/°C and laser on/off buttons	Adjustable high and low audible alarms; Min/Max/Avg/Dif displays; 10 reading memory	Dual targeting lasers; “K” type thermocouple port; 24 reading memory; Min/Max/Avg/Dif displays; Measurement Lock mode; Adjustable Hi and Lo temp alarm setpoints; White LED flashlight; Tripod mount; Powered by 2 “AAA” batteries (not included)	Data logging via USB cable, Min/Max/Avg/Dif displays, Adjustable high and low audible alarms, “K” type thermocouple port, 10-reading memory, Measurement Lock mode	Adjustable high and low audible alarms; Min/Max/Avg/Dif displays; 10 reading memory	Measurement Lock mode; Low battery and overrange indications; “K” type probe; 24 reading memory
Accessories Included	“9V” battery User’s manual, 1-year limited warranty	“9V” battery User’s manual, Soft pouch, 1-year limited warranty	Carrying case, User’s manual, “9V” battery, 1-year limited warranty	Hard plastic carrying case, User’s manual, 1-year limited warranty	Data logging software, USB cable, “K” type bead thermocouple probe with -50° to 500°F (-45° to 260°C) range, Hard case, “9V” battery, User’s manual, 1-year limited warranty	Carrying case, User’s manual, “9V” battery, 1-year limited warranty	Magnetic stand, “K” type bead thermocouple probe with -50° to 500°F (-45° to 260°C) range, (2) “AA” batteries, User’s manual, Metal case, 1-year limited warranty



INFRARED THERMOMETERS

IRT Comparison Chart



VR40
(see page 11)



IRT105
(see page 11)



IRT207
(see page 11)



IRTC50
(see page 6)



IRTC40
(see page 6)

SPECIFICATIONS

D:S Ratio Model No.	4:1 VR40	6:1 IRT105	8:1 IRT207	8:1 IRTC50	12:1 IRTC40
Name	3-in-1 Pocket IR Thermometer with NCV and Flashlight	6:1 Pocket IR Thermometer	8:1 Mid-Range IR Thermometer	8:1 Energy Audit IR Thermometer/Scanner with Star Burst Laser Targeting	8:1 Scanning IR Thermometer with Tricolor LCD
Temperature Measurement Range	-4° to 626°F (-20° to 330°C)	-22° to 482°F (-30° to 250°C)	-4° to 608°F (-20° to 320°C)	-40° to 428°F (-40° to 220°C)	-36° to 968°F (-38° to 520°C)
Resolution	0.1°	0.1°	0.1°	0.1°	0.1°
Accuracy	±3.6°F (2°C) or ±1% of reading (whichever is greater) above 32°F; ±4.5°F (2.5°C) below 32°F	±3.6°F (2°C) or 2% of reading (whichever is greater) above 32°F (0°C); ±5.4°F (3°C) or 2% of reading (whichever is greater) below 32°F	±3.6°F (2°C) or ±2% of reading (whichever is greater)	±3°F (2°C) or ±2% of reading (whichever is greater) above 32°F (0°C); ±5.4°F (3°C) or ±3% of reading (whichever is greater) below 32°F	±3°F (2°C) or ±2% of reading (whichever is greater)
Emissivity	Fixed at 0.95	Adjustable from 0.1 to 1.0 in 0.01 steps	Fixed at 0.95	Fixed at 0.95	Fixed at 0.95
Laser Power	<1mW (Class 2)	<1mW (Class 2)	<1mW (Class 2)	<3mW (Class 3R)	<5mW (Class 3R)
Other Key Features	Non-contact voltage detector with four ranges and sensitivity levels; Also checks 110VAC outlets for wiring faults; LED flashlight	Min/Max session displays; Measurement Lock mode; °F/°C switch	°F/°C and laser on/off switches	One pull of trigger captures reference temperature and launches scanning mode; Light panel color and beeper speed indicate whether target is above, within or below reference temperature ± setpoint bandwidth; Choice of three setpoint bandwidths (1°, 5° and 10°F); °F/°C switch	LCD backlight color and beeper speed indicate whether target is above, within or below reference temperature ± setpoint bandwidth; Choice of three setpoint bandwidths (1°, 5° and 10°F); °F/°C and laser on/off switches
Accessories Included	(2) "AAA" batteries, User's manual, 3-year limited warranty	(2) Non-rechargeable CR2032 batteries, Wrist strap, User's manual, 1-year limited warranty	"9V" battery, User's manual, 1-year limited warranty	"9V" battery, User's manual, 1-year limited warranty	(2) "AAA" batteries, Wrist strap, User's manual, 1-year limited warranty



IRT657
(see page 10)



IRT659K
(see page 8)



IRT730K
(see page 8)



IRT855DL
(see page 9)

SPECIFICATIONS

D:S Ratio Model No.	12:1 IRT657	12:1 IRT659K	30:1 IRT730K	50:1 IRT855DL
Name	12:1 Wide-Range IR Thermometer with Star Burst Laser Targeting	12:1 Dual Sensor IR Thermometer with "K" Type Thermocouple & Adjustable Emissivity	30:1 Ultra Wide-Range IR Thermometer with "K" Port	50:1 High-Performance Ultra Wide-Range Data Logging IR Thermometer with "K" Port
Temperature Measurement Range	-40° to 1076°F (-40° to 580°C)	IRT: 58° to 1202°F (-50° to 650°C) "K" Port: -146° to 2498°F (99° to 1370°C)	-58° to 1472°F (-50° to 800°C) for IRT; -40° to 2372°F (-40° to 1300°C) for "K" port	-25° to 3002°F (-32° to 1650°C) for IRT; -40° to 2498°F (-40° to 1370°C) for "K" port
Resolution	0.1° below 1000°	0.1° below 1000°	0.1° below 1000°; 1° at and above 1000°	0.1°
Accuracy	±3.6°F (2°C) or ±2% of reading (whichever is greater) above 32°F (0°C); ±5.4°F (3°C) or ±2% of reading below 32°F	IRT: ±3.6°F (2°C) or ±2% of reading above 32°F (0°C) ±5.4°F (3°C) or ±3% of reading below 32°F; "K" type thermocouple : ±(1% of reading + 1°C) above 0°C; ±(2% of reading + 2°C) below 0°C	±7.2°F (4°C) from -58° to 32°F (-50° to 0°C); ±1.5% of reading or ±3.6°F (2°C), whichever is greater, from 32° to 752°F (0° to 400°C); ±2% of reading or ±3.6°F (2°C), whichever is greater, from 752° to 1472°F (400° to 800°C)	±5.4°F (3°C) from -25° to 59°F (-32° to 15°C); ±(1.5% of reading + 3.6°F/2°C) from -59° to 122°F (15° to 50°C); ±(1.5% of reading + 1.8°F/1.0°C) from 122° to 950°F (50° to 510°C); ±1.5% of reading above 950°F (510°C)
Emissivity	Fixed at 0.95	Adjustable from 0.1 to 1.0 in 0.01 steps	Adjustable from 0.1 to 1.0 in 0.01 steps	Adjustable from 0.1 to 1.0 in 0.01 steps
Laser Power	<3mW (Class 3R)	<3mW (Class 3R)	<1mW (Class 2)	<1mW (Class 2)
Other Key Features	Low battery and overrange indications	Automatically stores last 10 readings, Displays Min/Max/Avg/Dif session values, Adjustable high & low temperature alarms, Star Burst Laser Targeting	"K" type thermocouple port; 100 reading memory; Min/Max/Avg/Dif displays; Adjustable Hi and Lo temperature alarms; °F/°C and laser on/off buttons	"K" port; Measurement Lock Mode; Adjustable Hi and Lo temperature alarms; Min/Max/Avg/Diff displays; 99 reading memory
Accessories Included	"9V" battery User's manual, Soft pouch, 1-year limited warranty	"K" type probe with -50° to 500°F (-45° to 260°C) range, "9V" battery, Soft pouch, User's manual, 1-year limited warranty	"K" type probe with -4° to 500°F (-20° to 260°C) range, "9V" battery, User's manual, Soft pouch, 3-year limited warranty	"K" type probe with -50° to 500°F (-45° to 260°C) range; PC interface-data logging software on mini-disc; USB cable; AC adaptor; "9V" battery; Custom metal carrying case; User's manual, 1-year limited warranty

INFRARED THERMOMETERS

Scanning IRTs



IRTC40



8:1 SCANNING IR THERMOMETER WITH TRICOLOR LCD – IRTC40

Ideal for detecting costly thermal leaks in residential and commercial buildings. Also suitable for HVAC/R system maintenance and electrical troubleshooting.

FEATURES:

- In scanning mode, LCD backlight color (red, green or blue) and beeper speed (fast, silent or slow) indicate—with no need to check readout—whether target is above, within or below reference temperature \pm setpoint bandwidth.
- Choice of three setpoint bandwidths: 1°, 5° and 10°F (0.5°, 3° and 5.5°C)

SPECIFICATIONS:

- ♦ Measurement Range: -36° to 968°F (-38° to 520°C)
- ♦ Measurement Accuracy: $\pm 3.6^\circ\text{F}$ (2°C) or $\pm 2\%$ of reading (whichever is greater)
- ♦ Display Resolution: 0.1° (F or C)
- ♦ Emissivity: Fixed at 0.95
- ♦ Dimensions: 6.30 x 1.57 x 4.65 in. (160 x 40 x 118mm)
- ♦ Weight: 5.47 oz. (155g) (including batteries)
- ♦ Power Source: Two “AAA” batteries (included)

INCLUDES:

- Batteries
- Wrist Strap
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01719 7	IRTC40



Patent Pending

IRTC50



8:1 ENERGY AUDIT INFRARED THERMOMETER/SCANNER WITH STAR BURST LASER TARGETING – IRTC50

Ideal for energy auditors, building inspectors, HVAC technicians, electricians, manufacturing technicians, food processing inspectors and homeowners.

FEATURES:

- Setpoint band options of 1°, 5° and 10°F (0.5°, 3°, 5.5°C)
- Red or blue light and fast or slow buzzer signal when the target temperature is above or below the reference temperature \pm the setpoint
- Unique Star Burst laser targeting system helps approximate the target spot size
- Large backlit LCD
- Releasing trigger holds reading
- Display and backlight turn off after 15 seconds of inactivity
- Auto-power off after 60 seconds of inactivity
- CE and ROHS approved

SPECIFICATIONS:

- ♦ Distance to Spot Ratio: 8:1
- ♦ Measurement Range: -40° to 428°F (-40° to 220°C)
- ♦ Measurement Accuracy: $\pm 3.6^\circ\text{F}$ (2°C) or $\pm 2\%$ of reading (whichever is greater) above 32°F (0°C); $\pm 5.4^\circ\text{F}$ (3°C) or $\pm 3\%$ of reading (whichever is greater) below 32°F
- ♦ Display Resolution: 0.1° (F or C)
- ♦ Emissivity: Fixed at 0.95
- ♦ Response Time: 0.5 seconds
- ♦ Operating Temperature: 32° to 104°F (0° to 40°C) @ <90%RH
- ♦ Laser Power: <3mW (Class 3R)
- ♦ Dimensions: 5.31 x 1.65 x 6.81 in. (135 x 42 x 173mm)
- ♦ Weight: 6.24 oz. (117g) without battery
- ♦ Power Source: 1 “9V” battery (included)

INCLUDES:

- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01442 4	IRTC50



Class 3R Laser Product
Laser radiation!
Avoid direct eye exposure!

50:1 ULTRA WIDE-RANGE IR THERMOMETER WITH "K" PORT – IRT850K

Ideal for measuring high temperatures safely—from a distance. Industrial applications include operation and maintenance of furnaces and heat exchangers.

FEATURES:

- Extremely wide measurement range
- Adjustable emissivity
- Dual targeting lasers
- Port for optional "K" type thermocouple
- Stores/recalls 24 data sets (measured temperature + emissivity setting)
- Min/Max/Avg/Dif displays
- Adjustable Hi and Lo temperature alarms
- Large backlit dual readout LCD
- White LED flashlight
- Tripod mount



SPECIFICATIONS:

- ♦ IRT Measurement Range: -76° to 2732°F (-60° to 1500°C)
- ♦ IRT Measurement Accuracy: $\pm 1.8^{\circ}\text{F}$ (1°C) from 59° to 95°F (15° to 35°C); $\pm 2\%$ of reading or 3.6°F (2°C), whichever is greater, from -27° to 59°F (-33° to 15°C) and from 95° to 2732°F (35° to 1500°C)
- ♦ IRT Emissivity: Adjustable from 0.1 to 1.0
- ♦ "K" Port Measurement Range: -83° to 2552°F (-64° to 1400°C)
- ♦ "K" Port Measurement Accuracy: $\pm (2\% \text{ of reading } + 3.6^{\circ}\text{F}/2^{\circ}\text{C})$ or $\pm 5.4^{\circ}\text{F}$ (3°C), whichever is greater
- ♦ IRT/"K" Port Measurement Resolution: 0.1° below 1000°; 1° at and above 1000°
- ♦ Dimensions: 7.99 x 7.76 x 1.85 in. (203 x 197 x 47mm)
- ♦ Weight (including batteries): 13.6 oz. (386g)
- ♦ Power Source: Two "AAA" batteries (not included)

INCLUDES:

- Custom Hard Plastic Carrying Case
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01670 1	IRT850K NISTIRT850K



IRT850K

100:1 ULTRA-HIGH TEMPERATURE INFRARED THERMOMETER WITH DUAL LASER TARGET TRACKING SYSTEM AND "K" PORT – IRT5000

Ideal for applications in power generation and transmission, maintenance, foundry operations, industrial site inspection, manufacturing MRO, and fire fighting operations.

FEATURES:

- 100:1 distance to spot (D:S) ratio
- Stores up to 24 data points
- Ultra-high temperature operation up to 4352°F (2400°C)
- High/Low alarm levels
- Fast response time of 0.5 seconds
- Min/Max/Dif memory
- Dual lasers for tracking target/spot size

SPECIFICATIONS:

- ♦ Distance to Spot (D:S) Ratio: 100:1
- ♦ IRT Measurement Range: 392° to 4352°F (200° to 2400°C)
- ♦ IRT Measurement Accuracy: $\pm 2\%$ of reading
- ♦ "K" Port Measurement Range: -83.2° to 2552°F (-64° to 1400°C)
- ♦ "K" Port Measurement Accuracy: $\pm 1\%$ of reading
- ♦ Emissivity: Adjustable from 0.10 to 1.0
- ♦ Laser Power: <1mW (Class 2)
- ♦ Dimensions: 2.4 x 8.2 x 9.2 in. (61 x 208 x 234mm)
- ♦ Weight: 16.8 oz. (475g)
- ♦ Power Source: 2 "AA" batteries (included)


INCLUDES:

- "K" Type Bead Thermocouple Probe with -50° to 500°F (-45° to 260°C) Range
- Batteries
- Metal Case
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01479 0	IRT5000



IRT5000

 **Laser radiation!**
Do not stare into beam!





IRT659K



12:1 DUAL SENSOR INFRARED THERMOMETER WITH "K" TYPE THERMOCOUPLE & ADJUSTABLE EMISSIVITY – IRT659K

Ideal for isolating overheated electrical components and hot spots, troubleshooting HVAC/R and automotive systems, and performance-testing motors and boilers.

FEATURES:

- Automatically holds measurements
- Automatically stores last 10 readings for recall
- Displays Min/Max/Avg/Dif temperatures captured during each scanning session
- Settable high and low temperature alarms
- °C/°F and laser pointer on/off switches

SPECIFICATIONS:

- ♦ Distance-to-Spot (D:S) Ratio: 12:1
- ♦ IR Temperature Measurement Range: -58° to 1202°F (-50° to 650°C)
- ♦ IR Temperature Measurement Accuracy: ±3.6°F (2°C) or ±2% of reading (whichever is greater) above 32°F (0°C); ±4.8°F (3°C) or ±3% of reading (whichever is greater) below 32°F
- ♦ "K" Port Measurement Range: -146° to 2498°F (-99° to 1370°C)
- ♦ Included "K" Type Thermocouple Range/Accuracy: -50° to 500°F (-45° to 260°C)/ ±(1% of reading + 1°C) above 0°C; ±(2% of reading + 2°C) below 0°C
- ♦ Display Resolution: 0.1° (F or C)
- ♦ Emissivity: Adjustable from 0.1 to 1.0 in 0.01 steps, with default of 0.95
- ♦ Display Size & Type: 1.5 in. (38mm) diagonal backlit LCD

- ♦ Response Time: 500 ms
- ♦ Laser Power: Class 3R (<3mW)
- ♦ Operating Temperature: 32° to 104°F (0° to 40°C) @ 10 to 75% RH, non-condensing
- ♦ Auto Power Off Trigger: 30 seconds of inactivity
- ♦ Dimensions: 5.31 x 1.65 x 6.81 in. (135 x 42 x 173mm)
- ♦ Weight: 6.93 oz. (168g) (without battery)
- ♦ Power Source: (1) "9V" battery (included)

INCLUDES:

- "K" Type Thermocouple Probe
- Soft Carrying Case
- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01598 8	IRT659K



30:1 ULTRA WIDE-RANGE IR THERMOMETER W/ "K" PORT – IRT730K

Ideal for measuring high temperatures safely—from a distance. Industrial applications include operation and maintenance of furnaces and heat exchangers.

FEATURES:

- Extremely wide measurement range
- Adjustable emissivity
- Laser targeting ring outlines analysis area
- Port for included "K" type bead thermocouple probe
- Releasing trigger holds measurement
- Automatically stores last 100 readings for recall
- Min/Max/Avg/Dif displays
- Adjustable Hi and Lo temperature alarm setpoints
- Large backlit LCD w/dual 4-digit readouts
- Auto power off
- °F/°C and laser on/off buttons
- Low battery indicator

SPECIFICATIONS:

- ♦ IRT Distance to Spot (D:S) Ratio: 30:1
- ♦ IRT Emissivity: Adjustable from 0.1 to 1.0 in 0.01 steps with default of 0.95
- ♦ IRT Measurement Range: -58° to 1472°F (-50° to 800°C)
- ♦ IRT Measurement Accuracy: ±7.2°F (4°C) from -58° to 32°F (-50° to 0°C); ±1.5% of reading or ±3.6°F (2°C), whichever is greater, from 32° to 752°F (0° to 400°C); ±2% of reading or ±3.6°F (2°C), whichever is greater, from 752° to 1472°F (400° to 800°C)

- ♦ IRT Measurement Resolution: 0.1° (F or C) below 1000°; 1° above 1000°
- ♦ Range/Accuracy of Included "K" Type Bead Thermocouple Probe: -4° to 500°F (-20° to 260°C)/ ±(2% + 2 digits)
- ♦ Response Time: <500ms
- ♦ Laser Power: <1mW (Class 2) @ wavelength of 630 to 670nm
- ♦ Spectral Response: 8 to 14μm
- ♦ Operating Temperature: 32° to 122°F (0° to 50°C) @10 to 90%RH
- ♦ Auto Power Off Trigger: 30 seconds of front-panel inactivity
- ♦ Dimensions: 7.6 x 3.8 x 3.3 in. (192 x 95 x 83mm)
- ♦ Weight: 9.7 oz. (275g)
- ♦ Power Source: 1 "9V" battery (included)

INCLUDES:

- "K" Type Bead Thermocouple Probe
- Soft Pouch
- Battery
- User's Manual
- 3-Year Limited Warranty

UPC	NO.
01643 5	IRT730K



IRT730K



Data Logging IRTs with "K" Port

50:1 ULTRA WIDE-RANGE DATA LOGGING IR THERMOMETER WITH "K" PORT – IRT855DL

Ideal for high-temperature data logging applications.

FEATURES:

- Extremely wide measurement range
- Adjustable emissivity
- Laser targeting system outlines analysis area
- "K" thermocouple port and probe
- Automatically stores last 100 readings (temperature + emissivity setting) for recall
- Min/Max/Avg/Dif displays
- Adjustable Hi and Lo temperature alarms
- Large backlit LCD w/dual 4-digit readouts
- Tripod mount

SPECIFICATIONS:

- ♦ IRT Range: -25° to 3002°F (-32° to 1650°C)
- ♦ IRT Accuracy: $\pm 5.4^{\circ}\text{F}$ (3°C) from -25° to 59°F (-32° to 15°C); $\pm 1.5\%$ of reading + $3.6^{\circ}\text{F}/2^{\circ}\text{C}$ from 59° to 122°F (15° to 50°C); $\pm 1.5\%$ of reading + $1.8^{\circ}\text{F}/1.0^{\circ}\text{C}$ from 122° to 950°F (50° to 510°C); $\pm 1.5\%$ of reading above 950°F (510°C)

- ♦ "K" Port Range: -40° to 2498°F (-40° to 1370°C)
- ♦ "K" Port Accuracy: $\pm 1.5\%$ of reading
- ♦ Dimensions: 5.5 x 2.2 x 7.5 in. (140 x 56 x 190mm)
- ♦ Weight: 17.64 oz. (500g)
- ♦ Power Source: "9V" battery (included)

INCLUDES:

- "K" Type Bead Thermocouple with Range of -50° to 500°F (-45° to 260°C)
- PC Interface/Data Logging Software
- USB Cable • Battery
- 9VDC Adapter for 110VAC Supply
- Custom Metal Carrying Case
- User's Manual • 3-Year Limited Warranty

UPC	NO.
01682 4	IRT855DL NISTIRT855DL



IRT855DL



50:1 DATA LOGGING ULTRA WIDE-RANGE INFRARED THERMOMETER WITH "K" PORT – IRT500DL

Range and D:S ratio make this IRT suitable for use in superheated and subcooled applications.

FEATURES:

- Very wide temperature measurement range and very high D:S ratio
- Data logging capability via included PC software and USB jack and cable
- 10-reading memory
- Min/Max/Avg/Dif displays
- Settable Hi and Lo temperature audible alarms
- °C/°F and laser on/off switches
- Tripod mountable

SPECIFICATIONS:

- ♦ Temperature Measurement Range: -58° to 1832°F (-50° to 1000°C)
- ♦ Measurement Accuracy: $\pm 5.4^{\circ}\text{F}$ (3°C) from -58° to -4°F (-50° to -20°C); $\pm 3.6^{\circ}\text{F}$ (2°C) from -4° to 212°F (-20° to 100°C); $\pm 2\%$ of reading from 212° to 1832°F (100° to 1000°C)
- ♦ Measurement Resolution: 0.1°
- ♦ Emissivity: Adjustable from 0.1 to 1.0
- ♦ Laser Power: <1mW (Class 2)
- ♦ Dimensions: 5.0 x 1.9 x 7.9 in. (127 x 47 x 200mm)
- ♦ Power Source: (1) "9V" battery (included)

INCLUDES:

- Data Logging Software
- USB cable
- "K" Type Bead Thermocouple Probe with -50° to 500°F (-45° to 260°C) Range
- Hard Case
- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
52046 0	IRT500DL



IRT500DL





IRT670
N

30:1 ULTRA WIDE-RANGE INFRARED THERMOMETER – IRT670

Suitable for the most demanding industrial applications, including furnaces and heat exchangers.

FEATURES:

- Min/Max/Avg/Dif + 10 reading memory
- Measurement lock mode
- °F/°C and laser on/off switches
- High and low audible alarms
- Large backlit LCD display

Laser radiation!
Do not stare into beam!

SPECIFICATIONS:

- ♦ Distance to Spot (D:S) Ratio: 30:1
- ♦ Emissivity: Adjustable from 0.1 to 1.0
- ♦ Measurement Range: -26° to 1400°F (-32° to 760°C)
- ♦ Measurement Accuracy: ±5°F (±3°C) from -26° to -4°F (-32° to -20°C); ±3°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2% from 212° to 1400°F (100° to 760°C)
- ♦ Resolution: 0.1° below 1000°
- ♦ Response Time: 0.5 seconds
- ♦ Laser Power: <1mW (Class 2)
- ♦ Battery Life: 16 hours
- ♦ Dimensions: 7.8 x 6.5 x 2 in. (200 x 166 x 51mm)
- ♦ Weight: 10.6 oz. (300g)
- ♦ Power Source: 1 “9V” battery (included)

INCLUDES:

- Carrying Case
- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
40670 0	IRT670



IRT675
N

50:1 ULTRA WIDE-RANGE INFRARED THERMOMETER – IRT675

Ideal for use in hazardous, superheated, subcooled, and other challenging industrial applications.

FEATURES:

- Min/Max/Avg/Dif + 10 reading memory
- Measurement lock mode
- °F/°C and laser on/off switches
- High and low audible alarms
- Large backlit LCD display

Laser radiation!
Do not stare into beam!

SPECIFICATIONS:

- ♦ Distance to Spot (D:S) Ratio: 50:1
- ♦ Emissivity: Adjustable from 0.1 to 1.0
- ♦ Measurement Range: -26° to 2372°F (-32° to 1300°C)
- ♦ Measurement Accuracy: ±5°F (±3°C) from -25.6° to -4°F (-32° to -20°C); ±3°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2% from 212° to 2372°F (100° to 1300°C)
- ♦ Resolution: 0.1° below 1000°
- ♦ Response Time: 0.5 seconds
- ♦ Laser Power: <1mW (Class 2)
- ♦ Battery Life: 16 hours
- ♦ Dimensions: 7.8 x 6.5 x 2 in. (200 x 166 x 51mm)
- ♦ Weight: 9.9 oz. (280g)
- ♦ Power Source: 1 “9V” battery (included)

INCLUDES:

- Carrying Case
- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
40677 9	IRT675



IRT650

12:1 WIDE-RANGE INFRARED THERMOMETER – IRT650

Suitable for most HVAC/R and automotive applications.

FEATURES:

- Sighting laser can be turned off
- Large 4-digit backlit LCD
- Selectable temperature unit
- 500ms response time

Laser radiation!
Do not stare into beam!

SPECIFICATIONS:

- ♦ Distance to Spot (D:S) Ratio: 12:1
- ♦ Measurement Range: -26° to 999°F (-32° to 535°C)
- ♦ Measurement Accuracy: ±5°F (±3°C) from -26° to -4°F (-32° to -20°C); ±3°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2% from 212° to 999°F (100° to 535°C)
- ♦ Resolution: 0.1°
- ♦ Emissivity: Fixed at 0.95
- ♦ Response Time: 0.5 seconds
- ♦ Laser Power: <1mW (Class 2)
- ♦ Battery Life: 16 hours
- ♦ Dimensions: 6.69 x 5.23 x 1.77 in. (170 x 133 x 45mm)
- ♦ Weight: 5.8 oz. (163g)
- ♦ Power Source: 1 “9V” battery (included)

INCLUDES:

- Soft Pouch
- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
40650 2	IRT650



IRT657
N

12:1 WIDE-RANGE INFRARED THERMOMETER WITH STAR BURST LASER TARGETING – IRT657

Ideal for isolating overheated electrical components and hot spots, troubleshooting HVAC/R and automotive systems, or performance-testing motors and boilers.

FEATURES:

- Wide measurement range
- Accuracy of ±3.6°F (2°C) or ±5.4°F (3°C), depending on temperature
- Large (1.6 in. diagonal) backlit LCD

Class 3R Laser Product
Laser radiation!
Avoid direct eye exposure!

SPECIFICATIONS:

- ♦ Distance-To-Spot (D:S) Ratio: 12:1
- ♦ Temperature Measurement Range: -40° to 1076°F (-40° to 580°C)
- ♦ Emissivity: Fixed at 0.95
- ♦ Measurement Accuracy: ±3.6°F (2°C) or ±2% of reading above 32°F (0°C); ±5.4°F (3°C) or ±2% of reading below 32°F
- ♦ Response Time: 500 msec for 95% response
- ♦ Laser Power: <3mW (Class 3R)
- ♦ Dimensions: 6.9 x 3.6 x 1.5 in. (175 x 91.5 x 38mm)
- ♦ Weight: 5.93 oz. (168g)
- ♦ Power Source: 1 “9V” battery (included)

INCLUDES:

- Soft Pouch
- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01480 6	IRT657



INFRARED THERMOMETERS

Mid-range and Compact IRTs

8:1 MID-RANGE INFRARED THERMOMETER – IRT206 (Made in Taiwan)

8:1 MID-RANGE INFRARED THERMOMETER – IRT207 (Made in China)

Ideal for most applications in HVAC/R, plumbing and heating, electrical, automotive and other industrial jobs.

FEATURES:

- Rugged and ergonomic design
- Backlit LCD display
- Sighting laser can be turned off
- °F/°C switch
- CE, RoHS, WEEE approved

SPECIFICATIONS:

- ◆ Distance to Spot (D:S) Ratio: 8:1
- ◆ Measurement Range: -4° to 608°F (-20° to 320°C)
- ◆ Measurement Accuracy: 3.6°F (2°C) or 2% of reading, whichever is greater
- ◆ Emissivity: Fixed at 0.95
- ◆ Resolution: 0.1°

- ◆ Operating Temperature: 32° to 104°F (0° to 40°C) @ 10 to 90% RH
- ◆ Laser Power: <1mW (Class 2)
- ◆ Dimensions: 5.98 x 4.65 x 1.26 in. (152 x 118 x 32mm)
- ◆ Weight: 4.41 oz. (170g) without battery
- ◆ Power Source: "9V" battery (included)

INCLUDES:

- Battery
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
02060 9	IRT206
01403 5	IRT207



IRT206
IRT207

Laser radiation!
Do not stare into beam!

3-IN-1 POCKET INFRARED THERMOMETER WITH NCV AND FLASHLIGHT – VR40

Also can check in a safe (non-contact) way whether a line, cable or AC outlet is "hot" (energized).

FEATURES:

- Includes 4:1 (D:S) IR thermometer
- Non-contact voltage detection (NCV) circuit sounds beeper and flashes LED when activated
- Safe for CAT III 600V, CAT II 1000V use
- Also checks 110VAC outlets for wiring faults
- Patent-pending design places IR and NCV sensors and flashlight on same end

SPECIFICATIONS:

- ◆ IRT Range: -4° to 626°F (-20° to 330°C)
- ◆ IRT Accuracy: ±3.6°F (2°C) or ±1% of reading (whichever is greater) above 32°F; ±4.5°F (2.5°C) below 32°F
- ◆ Laser Power: <1mW (Class 2)
- ◆ IRT Emissivity: Fixed at 0.95

- ◆ Display Digits/Counts/Resolution: 4/2000/0.1°
- ◆ Detection Ranges/Sensitivities: 12 to 25VAC, 70 to 125VAC, 150 to 240VAC, 250 to 1000VAC
- ◆ Operating Temperature: 32° to 113°F (0° to 45°C) @ <95% RH
- ◆ Dimensions: 6.0 x 1.2 x 1.2 in. (152 x 31 x 31mm)
- ◆ Weight (with batteries): 7.8 oz. (220g)
- ◆ Power Source: (2) "AAA" batteries (included)

INCLUDES:

- Batteries
- User's Manual
- 3-Year Limited Warranty

UPC	NO.
01634 3	VR40



Patent Pending

VR40

Laser radiation!
Do not stare into beam!

6:1 POCKET INFRARED THERMOMETER – IRT105

Ideal for spot-checking the temperature of substances and surfaces from a distance. Perfect for electrical troubleshooting and HVAC equipment maintenance.

FEATURES:

- Adjustable emissivity
- Max/Min measurement and measurement lock modes
- Selectable °F or °C unit
- Large LCD
- Separate batteries for thermometer and laser
- Small and light and easy to use
- CE approved

SPECIFICATIONS:

- ◆ Distance-To-Spot (D:S) Ratio: 6:1
- ◆ Measurement Range/Resolution: -22° to 482°F (-30° to 250°C)/0.1°
- ◆ Measurement Accuracy: ±3°F (2°C) or 2% of reading (whichever is greater) above 32°F (0°C); ±5°F (3°C) or 2% of reading (whichever is greater) below 32°F
- ◆ Emissivity: Adjustable from 0.1 to 1

- ◆ Response Time: 500 msec for 95% response
- ◆ Laser Power: <1mW (Class 2)
- ◆ Thermometer Battery Life: 50 hours, typical
- ◆ Operating Temperature: 32° to 104°F (0° to 40°C) @ <75% RH
- ◆ Dimensions: 4.25 x 2.05 x 0.98 in. (108 x 52 x 25mm)
- ◆ Weight: 1.41 oz. (40g)
- ◆ Power Source: (2) non-rechargeable "CR2032" Li-ion batteries

INCLUDES:

- Wrist strap
- Batteries
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
20196 1	IRT105



IRT105

Laser radiation!
Do not stare into beam!

Indicates optional NIST calibration is available





Specialty Tools & Instruments
