

INFRARED THERMOMETERS – 2015



Precision, Specialty and Innovation . . . Since 1922



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New & Featured Products



IRT850K 50:1 Ultra Wide-Range IRT with "K" Port (see page 7)



IRT855DL 50:1 Ultra Wide-Range Data Logging IRT with "K" Port (see page 9)



IRTC40 8:1 Scanning IRT with Tricolor LCD (see page 6)



Government-compliant IRTs

U.S. General Services Administration (GSA) Schedule Contracts are long-term, government-wide contracts between commercial firms and the GSA designed to give federal consumers (e.g., federal agencies and the military) access to commercial products and services at fair, reasonable and competitive prices. Such contracts comply with the Trade Agreements Act (TAA) of 1979, which requires that purchased products and services were manufactured or "substantially transformed" in a "designated country". Taiwan is a TAA-designated country; China is not.













IRT206 (see page 11)

IRT650 (see page 10)

IRT670 (see page 10)

IRT850K (see page 7)

IRT500DL (see page 9)

IRT675 (see page 10)

IRT5000 (see page 9)

| D:S Ratio | 8:1 | 12:1 | 30:1 | 30:1 | 50:1 | 50:1 | 100:1 |
|-------------------------------------|--|--|---|---|---|---|--|
| Model No. | IRT206 | IRT650 | IRT670 | IRT850K | IRT500DL | IRT675 | 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) | -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° | for "K" port 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 | ±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 | <1mW | <1mW | <1mW | <1mW | <1mW | <1mW |
| | (Class 2) | (Class 2) | (Class 2) | (Class 2) | (Class 2) | (Class 2) | (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 | mode; Low battery an 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 warrant |

IRT Comparison Chart













VR40 (see page 11)

IRT105 (see page 11)

IRT207 (see page 11)

IRTC50 (see page 6)

IRTC40 (see page 6)

| D:S Ratio | 4:1 | 6:1 | 8:1 | 8:1 | 12:1 |
|--------------|------------------------|--------------------------------|---------------------------------|-------------------------------|-------------------------------|
| Model No. | 4:1 VR40 | 6:1 IRT105 | 8:1 IRT207 | 8:1 IRTC50 | IRTC40 |
| Name | 3-in-1 Pocket | 6:1 Pocket | 8:1 Mid-Range | 8:1 Energy Audit IR | 8:1 Scanning |
| Nume | IR Thermometer with | IR Thermometer | IR Thermometer | Thermometer/Scanner with | IR Thermometer with |
| | NCV and Flashlight | iii iiieiiiioiiietei | iii memeter | Star Burst Laser Targeting | Tricolor LCD |
| | Trev and riasinight | | | Star Barst Easer Targeting | THEORET EED |
| Temperature | -4° to 626°F | -22° to 482°F | -4° to 608°F | -40° to 428°F | -36° to 968°F |
| Measurement | (-20° to 330°C) | (-30° to 250°C) | (-20° to 320°C) | (-40° to 220°C) | (-38° to 520°C) |
| Range | | | | | |
| | 0.40 | 0.40 | 0.40 | 0.40 | 0.40 |
| Resolution | 0.1° | 0.1° | 0.1° | 0.1° | 0.1° |
| Accuracy | ±3.6°F (2°C) or ±1% of | ±3.6°F (2°C) or 2% of reading | ±3.6°F (2°C) or ±2% of reading | ±3°F (2°C) or ±2% of reading | ±3°F (2°C) or ±2% of reading |
| | reading | (whichever is greater) | (whichever is greater) | (whichever is greater) above | (whichever is greater) |
| | (whichever is greater) | above 32°F (0°C); ±5.4°F (3°C) | | 32°F (0°C); ±5.4°F (3°C) or | |
| | above 32°F; | or 2% of reading | | ±3% of reading (whichever is | |
| | ±4.5°F (2.5°C) | (whichever is greater) | | greater) below 32°F | |
| | below 32°F | below 32°F | | | |
| Emissivity | Fixed at 0.95 | Adjustable from 0.1 to 1.0 | Fixed at 0.95 | Fixed at 0.95 | Fixed at 0.95 |
| Emissivity | Fixed at 0.95 | 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 | Non-contact voltage | Min/Max session displays; | °F/°C and laser on/off switches | One pull of trigger captures | LCD backlight color and beep |
| Key Features | detector with four | Measurement Lock mode; | | reference temperature and | speed indicate whether targ |
| | ranges and sensitivity | °F/°C switch | | launches scanning mode; Light | is above, within or below |
| | levels; Also checks | | | panel color and beeper speed | reference temperature |
| | 110VAC outlets for | | | indicate whether target is | ± setpoint bandwidth; |
| | wiring faults; LED | | | above, within or below | Choice of three setpoint |
| | flashlight | | | reference temperature | bandwidths (1°, 5° and 10°F |
| | | | | ± setpoint bandwidth; | °F/°C and laser on/off switch |
| | | | | Choice of three setpoint | |
| | | | | bandwidths (1°, 5° and 10°F); | |
| Accessories | (2) "AAA" batteries, | (2) Non-rechargeable CR2032 | "9V" battery, | °F/°C switch "9V" battery, | (2) "AAA" batteries, |
| Included | User's manual, | batteries, Wrist strap, | User's manual, | User's manual, | Wrist strap, |
| | 3-year limited | User's manual, | 1-year limited warranty | 1-year limited warranty | User's manual, |
| | warranty | 1-year limited warranty | , | , | 1-year limited warranty |
| | , | _ , sacaaancy | | | |
| | | | | | |
| | 1 | | | | |



INFRARED THERMOMETERS IRT Comparison Chart









IRT855DL (see page 9)

| D:S Ratio | 12:1 | 12:1 | 30:1 | 50:1 |
|----------------------------|--------------------------------|----------------------------------|------------------------------------|---|
| Model No. Name | IRT657 | IRT659K | IRT730K | IRT855DL |
| Name | 12:1 Wide-Range IR | 12:1 Dual Sensor IR | 30:1 Ultra Wide-Range | 50:1 High-Performance |
| | Thermometer with | Thermometer with "K" Type | IR Thermometer with "K" Port | Ultra Wide-Range |
| | Star Burst Laser Targeting | Thermocouple & Adjustable | with "K" Port | Data Logging IR |
| T | -40° to 1076°F | Emissivity IRT: 58° to 1202°F | -58° to 1472°F (-50° to 800°C) | Thermometer with "K" Port -25° to 3002°F (-32° to 1650°C |
| Temperature Measurement | (-40° to 580°C) | (-50° to 650°C) | for IRT; -40° to 2372°F | for IRT; -40° to 2498°F |
| | (-40 to 380 c) | "K" Port: -146° to 2498°F | (-40° to 1300°C) | (-40° to 1370°C) for "K" port |
| Range | | (99° to 1370°C) | for "K" port | (-40 to 1370 c) for K port |
| Resolution | 0.1° below 1000° | 0.1° below 1000° | 0.1° below 1000°; 1° at and | 0.1° |
| Resolution | 0.1 below 1000 | 0.1 below 1000 | above 1000° | 0.1 |
| Accuracy | ±3.6°F (2°C) or ±2% of reading | IRT: ±3.6°F (2°C) or ±2% | ±7.2°F (4°C) from -58° to 32°F | ±5.4°F (3°C) from -25° to 59°l |
| Accuracy | (whichever is greater) above | of reading above 32°F (0°C) | (-50° to 0°C); ±1.5% of reading or | , , |
| | 32°F (0°C); ±5.4°F (3°C) or | ±5.4°F (3°C) or ±3% of reading | ±3.6°F (2°C), whichever is | ±(1.5% of reading + 3.6°F/2°C |
| | ±2% of reading below 32°F | below 32°F; "K" type | greater, from 32° to 752°F | from -59° to 122°F (15° to 50°C |
| | 12% of reading below 32 F | thermocouple : ±(1% of | (0° to 400°C); ±2% of reading | ±(1.5% of reading + 1.8°F/1.0° |
| | | reading + 1°C) above 0°C; | or ±3.6°F (2°C), whichever is | from 122° to 950°F (50° to 510° |
| | | ±(2% of reading | greater, from 752° to 1472°F | ±1.5% of reading above 950° |
| | | + 2°C) below 0°C | (400° to 800°C) | (510°C) |
| | | | ` ' | ` ′ |
| Emissivity | Fixed at 0.95 | Adjustable from | Adjustable from | Adjustable from |
| | | 0.1 to 1.0 in 0.01 steps | 0.1 to 1.0 in 0.01 steps | 0.1 to 1.0 in 0.01 steps |
| Laser Power | <3mW (Class 3R) | <3mW (Class 3R) | <1mW (Class 2) | <1mW (Class 2) |
| Other | Low battery and overrange | Automatically stores last | "K" type thermocouple port; | "K" port; Measurement Lock |
| Key Features | indications | 10 readings, Displays | 100 reading memory; | Mode; Adjustable Hi and Lo |
| | | Min/Max/Avg/Dif session | Min/Max/Avg/Dif displays; | temperature alarms; |
| | | values, Adjustable high & low | Adjustable Hi and Lo | Min/Max/Avg/Diff displays; |
| | | temperature alarms, Star | temperature alarms; | 99 reading memory |
| | | Burst Laser Targeting | °F/°C and | |
| | | | laser on/off buttons | |
| | | | | |
| | | | | |
| | | | | |
| | ((2) | wall a | (0.11) | |
| Accessories | "9V" battery | "K" type probe with | "K" type probe with | "K" type probe with -50° to 500 |
| Included | User's manual, | -50° to 500°F (-45° to 260°C) | -4° to 500°F (-20° to 260°C) | (-45° to 260°C) range; |
| | Soft pouch, | range, "9V" battery, | range, "9V" battery, | PC interface-data logging |
| | 1-year limited warranty | Soft pouch, | User's manual, | software on mini-disc; USB cab |
| | | User's manual, | Soft pouch, | AC adaptor; "9V" battery; |
| | | 1-year limited warranty | 3-year limited warranty | Custom metal carrying case; |
| | | | | User's manual, |
| | i e | | 1 | 1-year limited warranty |

Scanning IRTs





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.

- 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 ± 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: ±3.6°F (2°C) or ±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

NO. 017197 IRTC40

CE RoHS



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

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: ±3.6°F (2°C) or ±2% of reading (whichever is greater) above 32°F (0°C); ± 5.4 °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)</p>
- ♦ 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

HPC NO 014424 IRTC50



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: ±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)
- ♦ IRT Emissivity: Adjustable from 0.1 to 1.0
- ◆ "K" Port Measurement Range: -83° to 2552°F (-64° to 1400°C)
- ♦ 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 |
| | NISTIRT850 |



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: ±2% of reading
- "K" Port Measurement Range: -83.2° to 2552°F (-64° to 1400°C)
- ◆ "K" Port Measurement Accuracy: ±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 |





Laser radiation!

Do not stare into beam!







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 IRT6598



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 frontpanel 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: ±5.4°F (3°C) from -25° to 59°F $(-32^{\circ} \text{ to } 15^{\circ}\text{C}); \pm (1.5\% \text{ of reading} + 3.6^{\circ}\text{F/2}^{\circ}\text{C})$ 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); $\pm 1.5\%$ of reading above 950°F (510°C)

- ♦ "K" Port Range: -40° to 2498°F (-40° to 1370°C)
- ◆ "K" Port Accuracy: ±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 |
| | NISTIRT855DI |



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: ±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)
- ♦ 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

| UPU | NU. |
|---------|----------|
| 52046 0 | IRT500DI |



N

IRT500DL







Extended Temperature Range IRTs



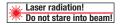


30:1 ULTRA WIDE-RANGE INFRARED THERMOMETER -

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



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)

 Carrying Case
 Battery
 User's Manual
 1-Year Limited Warranty UPC NO.

IRT670 40670 0

IRT675 N **SPECIFICATIONS:** 2372°F (100° to 1300°C)

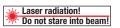
CE

RoH3

50:1 ULTRA WIDE-RANGE INFRARED THERMOMETER – IRT675

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

- 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



- ♦ 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
- ◆ 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.

IRT675 40677 9



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:

10 -

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 performancetesting 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)

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

NO. IRT657 014806



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 |





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. |
|--------|------|
| 016343 | VR40 |

Patent Pending VR40 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)</p>
- ◆ 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

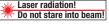
INCLUDES:

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

UPC NO. 20196 1 **IRT105**







11

Indicates entional MICT calibration is available



Specialty Tools & Instruments