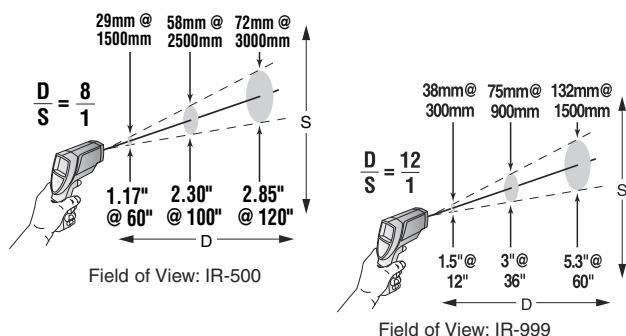


Simple, One Button Operation for General Use

The one button operation of the IR-500 and IR-999 offers the ultimate in ease of use for fast, accurate temperature measurement. With single-point laser sighting, their point-and-shoot operation and back-lit LCD displays make them user friendly, with minimal training required for use. These units are lightweight yet durable enough to withstand daily use. Pick the unit that fits your application based on your measuring distance and the temperature range of the objects you wish to measure.

3M™ Infrared Thermometer IR-500, IR-999

The IR-500 thermometer is pocket-sized which makes it convenient to carry during daily maintenance checks. With a 8:1 distance-to-spot ratio, it is best used within 4 feet of the object and has a temperature range of 0° to 500°F (-18° to 260°C).



Check cylinder heads, heating and cooling systems, and scan radiators for blockage.

The 3M Infrared Thermometer IR-999 covers the basics of temperature measurement in industrial environments. It features a 12:1 distance to spot ratio that allows more flexibility in measuring hard to reach objects.

The ability of the IR-999 thermometer to read sub-zero temperatures adds to its versatility. The IR-999 measures up to 999°F (535°C)



Check for hot spots in electrical panels and circuit breakers, generators and gearboxes.



LCD Display for IR-750

Applications

Electrical Maintenance

- Locate over-temperature conditions caused by defective circuit breakers, overload conditions or poor electrical connections
- Monitor electric motors
- Locate loose wire connections
- Diagnose nuisance tripping of circuit breakers
- Locate defective ballasts within fluorescent fixtures

Mechanical Equipment Maintenance

- Monitor furnace exteriors
- Test heat exchangers, steam traps, air vents
- Identify refrigeration problems
- Check thermal insulation

Car/Truck/Fleet Maintenance

- Locate radiator core blockages
- Identify misfiring spark plugs
- Monitor electrical components
- Diagnose low voltage batteries

Transportation

- Monitor road surface temperature for icing conditions
- Maintain asphalt temperature during preparation and application

*Infrared thermometers are approved for use with food by the U. S. Food and Drug Administration (FDA).

When your job calls for leading edge temperature measurement technology, 3M provides the solution with the family of 3M™ Infrared Thermometers. These units provide a fast, easy and accurate way to measure a wide range of temperatures at a safe distance. You can monitor equipment more closely, more accurately, and more often — and spot trouble before it leads to costly malfunction and repair.

Choose the thermometer that's right for your job

Product	Laser Sighting	Distance-to-Spot Ratio	Alarms	Data Logs	Emissivity	Maximum Temperature
IR-500	Single spot	8:1	-	-	Fixed	500°F (260°C)
IR-999	Single spot	12:1	-	-	Fixed	999°F (535°C)
IR-1100	Single spot	30:1	HI-LO	12	Adjustable	1100°F (600°C)
IR-1400	Single spot	50:1	HI-LO	12	Adjustable	1400°F (760°C)
IR-1400IS	Single spot	50:1	HI-LO	12	Adjustable	1400°F (760°C)
IR-60L2	3 dot laser	60:1	HI Only	-	Adjustable	1600°F (870°C)
IR-60CFO	3 dot laser, Close focus	50:1	HI Only	-	Adjustable	1600°F (870°C)
IR-60EXPL2	3 dot laser	60:1	HI-LO	100, Software	Adjustable	1600°F (870°C)
IR-60EXCFO	3 dot laser, Close focus	50:1	HI-LO	100, Software	Adjustable	1600°F (870°C)

Does your job require NIST or DKD compliance? Be sure to order your IR-999, IR-1100, IR-1400, IR-60L2, or IR-60EXPL2 with certification (NIST or DKD).

Single Dot Laser



3 Dot laser



The 3 Point laser defines the diameter of the area being measured; a single laser spot shows the center of the measurement area.

3M™ Infrared Thermometers

Specifications	Models			
	IR-500	IR-999	IR-1100	IR-1400
Temperature Range	0 to 500°F (-18 to 260°C)	-25 to 999°F (-32 to 535°C)	-25 to 1100°F (-32 to 600°C)	-25 to 1400°F (-32 to 760°C)
Accuracy of Reading	±2%	±1%	±1%	±1%
Repeatability of Reading	±2%	±0.5%	±0.5%	±0.5%
95% Response Time	500 msec	500 msec	500 msec	500 msec
Spectral Response	7-18 microns	8-14 microns	8-14 microns	8-14 microns
Optical System	8:1	12:1	30:1	50:1
MAX Temperature	–	X	X	X
MIN, DIF, AVG Temp	–	–	X	X
Recall Last Reading	–	–	X	X
Display Hold	X	X	X	X
HI Alarm	–	–	X	X
LO Alarm	–	–	X	X
Low Battery Indicator	X	X	X	X
LCD Backlight	X	X	X	X
Laser (Class II)	X	X	X	X
Emissivity	Pre-set 0.95	Pre-set 0.95	Adjustable from 0.10 to 1.0	Adjustable from 0.10 to 1.0
Temperature Display	°C or °F selectable 3.5 digit LCD	°C or °F selectable 3.5 digit LCD	°C or °F selectable 3.5 digit LCD	°C or °F selectable 3.5 digit LCD
Display Resolution	–	0.5°F (0.2°C)	0.1°F (0.1°C)	0.1°F (0.1°C)
Ambient Operating Range	32 to 120°F (0 to 50°C)	32 to 120°F (0 to 50°C)	32 to 120°F (0 to 50°C)	32 to 120°F (0 to 50°C)
Relative Humidity, ambient	10-95% RH noncondensing, @ > 86°F (30°C)	10-95% RH noncondensing, @ > 86°F (30°C)	10-95% RH noncondensing, @ > 86°F (30°C)	10-95% RH noncondensing, @ > 86°F (30°C)
Storage Temperature	-13° to 158°F (-20° to 60°C) w/out battery	-13° to 158°F (-20° to 60°C) w/out battery	-13° to 158°F (-20° to 60°C) w/out battery	-13° to 158°F (-20° to 60°C) w/out battery
Power	9V Alkaline or NiCd battery	9V Alkaline or NiCd battery	9V Alkaline or NiCd battery	9V Alkaline or NiCd battery
Battery Life (Alkaline)	12 hours	10 hours with laser and backlight on 40 hours with laser and backlight off	20 hours with laser and backlight on 50% 40 hours with laser and backlight off	
Dimensions	7.25 x 1.75 x 1.5 in (184 x 45 x 38 mm)	8 x 6 x 2 in (200 x 160 x 55 mm)	8 x 6 x 2 in (200 x 160 x 55 mm)	8 x 6 x 2 in (200 x 160 x 55 mm)
Weight	8 oz. (227g)	11 oz. (320g)	11 oz. (320g)	11 oz. (320g)
Locking Trigger	–	–	X	X
Tripod Mount	–	1/4"-20 UNC Threading	1/4"-20 UNC Threading	1/4"-20 UNC Threading
Accessories Standard With Each Unit	–	Hard plastic case Wrist strap	Hard plastic case Wrist strap	Hard plastic case Wrist strap
Data Logger Points	–	–	12 data points in memory	12 data points in memory

* NIST and DKD certification is optional on all models except the IR-500.

** The IR-60CFO thermometers has the same specifications as the IR-60L2 and IR-60EXCFO have the same specifications as the IR-60EXPL2 thermometer.

*** The IR-1400IS thermometers has the same specifications as the IR-1400 thermometers.

