LAND®
AMETEK®

System 4

High-precision pyrometers

System 4 thermometers offer exceptional flexibility with a choice of single wavelength, ratio, fibre optic and fibre optic ratio models. Thermometer type, temperature range, spectral response and optical characteristics are chosen to suit the widest variety of applications from 25 to 2600 °C/78 to 4700 °F.

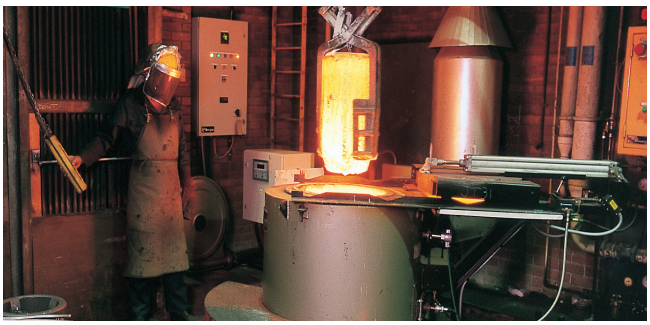
RADIATION THERMOMETERS

Standard bodied thermometers all feature through the lens sighting with a 6° field of view. Adjustable focus with a circular graticule gives precise alignment on the smallest targets. Two optical variants are available: Standard focus - adjustable between 500 mm/19.7 in and infinity, and short focus - viewing from 350 mm to 1m/13.8 to 39.4 in. Close-up lenses are available with viewing distances down to 90 mm / 3.5 in.

FIBRE OPTIC THERMOMETERS

Fibre optic thermometers allow the detector and electronics enclosure to be located some distance away from the measuring point and permit viewing of normally inaccessible targets, where there are high magnetic fields or in high ambient temperatures. There is a choice of three optic heads and three light guide lengths as well as optional laser targeting.

System 4 is a complete temperature measurement system comprised of high radiation thermometers, processors and accessories.



FEATURES & BENEFITS

- **Suitable for a range of applications** with a durable design to withstand harsh operating conditions.
- **Accurate, reliable, measurement**.
- **Focusable optics** for standard and short focus versions with through the lens sighting providing clear and guaranteed defenition of target.
- **Optional close-up lenses** provide measurements of targets as small as 0.45 mm.
- **Flexible fiber optics light guide versions** with optional laser targeting system to define target spot.

See degrees differently.

SYSTEM 4 PYROMETER SPECIFICATIONS – valid from 5% to 95% of measurement range

Model	Range	Wavelength µm	Field of View	Temperature Specified	Temperature Operating	Response Time T_{95}	Interchangeability	Repeatability	Accuracy(1)	Stability
Standard Thermometers										
M1 450/1000C M1 850/1850F	450 to 1000 °C 850 to 1850 °F	1	30:1	0 to 70 °C 32 to 158 °F	-10 to 80 °C 14 to 176 °F	5 ms	1 K	1 K	0.4 %K	0.2 K/K
M1 600/1600C M1 1100/2900F	600 to 1600 °C 1100 to 2900 °F	1	100:1	0 to 70 °C 32 to 158 °F	-10 to 80 °C 14 to 176 °F	5 ms	1 K	1 K	0.4 %K	0.2 K/K
M1 800/2600C M1 1500/4700F	800 to 2600 °C 1500 to 4700 °F	1	200:1	0 to 70 °C 32 to 158 °F	-10 to 80 °C 14 to 176 °F	5 ms	1 K	2 K	0.7 %K	0.3 K/K
M2+ 300/1100C M2+ 600/2000F	300 to 1100 °C 600 to 2000 °F	1.6	100:1	0 to 60 °C 32 to 140 °F	-10 to 60 °C 14 to 140 °F	5 ms	1 K	1 K	0.25 %K + 1 K	0.2 K/K
M4 50/250C M4 150/500F	50 to 250 °C 150 to 500 °F	2.4	30:1	5 to 45 °C 41 to 113 °F	0 to 50 °C 32 to 122 °F	100 ms	1 K	1 K	3 K (2)	0.1 K/K
M4 150/550C M4 300/1000F	150 to 550 °C 300 to 1000 °F	2.4	100:1	5 to 45 °C 41 to 113 °F	0 to 50 °C 32 to 122 °F	100 ms	1 K	1 K	4 K	0.1 K/K
M6+ 0/300C M6+ 50/600F	0 to 300 °C 50 to 600 °F	3 to 5	75:1	5 to 50 °C 41 to 122 °F	0 to 50 °C 32 to 122 °F	100 ms	1 K	1 K	0.3 %K +2.5K	0.15 K/K(3)
M6+ 100/700C M6+ 200/1300F	100 to 700 °C 200 to 1300 °F	3 to 5	100:1	5 to 50 °C 41 to 122 °F	0 to 60 °C 32 to 140 °F	100 ms	1 K	1 K	0.3 %K + 2 K	0.2 K/K
R1 600/1600C R1 1100/2900F	600 to 1600 °C 1100 to 2900 °F	0.85 & 1.1	50:1	0 to 50 °C 32 to 122 °F	-10 to 60 °C 14 to 140 °F	15 ms	0.25 %K	1 K	0.65 %K	0.05 %K/K
R1 1000/2600C R1 1800/4700F	1000 to 2600 °C 1800 to 4700 °F	0.85 & 1.1	200:1	0 to 50 °C 32 to 122 °F	-10 to 60 °C 14 to 140 °F	15 ms	0.45 %K	2 K	1.1 %K	0.1 %K/K
Fibre Optic Thermometers										
M1 600/1600CYL M1 1100/2900FYL	600 to 1600 °C 1100 to 2900 °F	1	25:1	0 to 70 °C 32 to 158 °F	-10 to 80 °C 14 to 176 °F	5 ms	1 K	1 K	0.4 %K	0. 2K/K
M1 800/2600CYL M1 1500/4700FYL	800 to 2600 °C 1500 to 4700 °F	1	75:1	0 to 70 °C 32 to 158 °F	-10 to 80 °C 14 to 176 °F	5 ms	1 K	2 K	0.7 %K	0.3 K/K
M2 300/1100CYL M2 600/2000FYL	300 to 1100 °C 600 to 2000 °F	1.6	25:1	0 to 50 °C 32 to 122 °F	-10 to 60 °C 14 to 140 °F	5 ms	1 K	1 K	0.25 %K + 1 K	0.2 K/K
R1 600/1600CYL R1 1100/2900FYL	600 to 1600 °C 1100 to 2900 °F	0.85 & 1.1	25:1	0 to 50 °C 32 to 122 °F	-10 to 60 °C 14 to 140 °F	15 ms	0.25 %K	1 K	0.65 %K	0.05 %K/K
R1 1000/2600CYL R1 1800/4700FYL	1000 to 2600 °C 1800 to 4700 °F	0.85 & 1.1	75:1	0 to 50 °C 32 to 122 °F	-10 to 60 °C 14 to 140 °F	15 ms	0.25 %K	2 K	1.1%K	0.1 %K/K

1. Accuracy quoted to ITS90. Accuracy specifications above apply when the System 4 is used with a Landmark Technic or Landmark Graphic processor. Measurement uncertainties are increased by 50% when used with the Landmark Basic processor.
2. Above 75 °C / 170 °F
3. 0.2 K/K for target temperature < 30 °C

LAND® AMETEK

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We are fully committed to Quality Assurance. See all our accreditations at **AMETEK-LAND.COM/QUALITY**

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