

**SPECIFICATIONS**

	Handheld	Handheld-Plus	Handheld-Advanced	Econ. I	Econ. II	Gun Type	Gun Type-Plus	Gun Type-Advanced	Low Temp.	Low Temp-Plus	Broad Temp.	High performance I	High performance II	High performance II	
Model name	ST620	ST622	ST623	ST630	ST632	ST650	ST652	ST653	ST656	ST658	ST660	ST685	ST688	ST689	
<b>Figures</b>															
Temperature Range	-32~535°C (-25~999°F)	-32~535°C (-25~999°F)	-32~535°C (-25~999°F)	-20~320°C (-4~605°F)	-20~500°C (-4~930°F)	-32~535°C (-25~999°F)	-32~535°C (-25~999°F)	-32~535°C (-25~999°F)	-50~316°C (-58~600°F)	-50~316°C (-58~600°F)	-50~999°C (-58~1830°F)	-50~1000°C (-58~1832°F)	-50~1000°C (-58~1832°F)	-50~1000°C (-58~1832°F)	
Accuracy	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±2% of reading or ±2°C whichever is greater	±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~500°C(212~930F)	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±3.0°C(±5F) from -32~20°C(-25~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~535°C(212~999F)	±3.0°C(±5F) from -50~30°C(-58~22F), ±2.0°C(±3F) from -30~100°C(-22~212F), ±2% from 100~316°C(212~600F)	±3.0°C(±5F) from -50~30°C(-58~22F), ±2.0°C(±3F) from -30~100°C(-22~212F), ±2% from 100~316°C(212~600F)	±3.0°C(±5F) from -50~20°C(-58~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~999°C(212~1830F)	±3.0°C(±5F) from -50~20°C(-58~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~1000°C(212~1832F)	±3.0°C(±5F) from -50~20°C(-58~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~1000°C(212~1832F)	±3.0°C(±5F) from -50~20°C(-58~4F), ±2.0°C(±3F) from -20~100°C(-4~212F), ±2% from 100~1000°C(212~1832F)
Thermopile	5~14 μm	5~14 μm	5~14 μm	5~14 μm	5~14 μm	5~14 μm	5~14 μm	5~14 μm	8~14 μm	8~14 μm	8~14 μm	8~14 μm	8~14 μm	8~14 μm	
Lens	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Fresnel	Ge	Ge	Ge	
Repeatability	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	+/-1°C or 2°F	
Resolution	0.1°C / 0.1°F	0.1°C / 0.1°F	0.1°C / 0.1°F	0.5°C / 0.5°F	0.2°C / 0.2°F	0.1°C / 0.1°F	0.1°C / 0.1°F	0.1°C / 0.1°F	0.1°C / 0.1°F	0.1°C / 0.1°F	1°C / 1°F	0.1°C / 0.1°F	0.1°C / 0.1°F	0.1°C / 0.1°F	
Response Time	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	500 ms	
Emissivity	0.95 fixed	0.95 fixed	Adjustable 0.1 ~ 1.0	0.95 fixed	0.95 fixed	0.95 fixed	0.95 fixed	Adjustable 0.1~ 1.0	0.97 fixed	0.97 fixed	0.95 fixed	Adjustable 0.1 ~ 1.0	Adjustable 0.1 ~ 1.0	Adjustable 0.1 ~ 1.0	
Distance/Spot Ratio	12:1	12:1	12:1	8:1	8:1	12:1	12:1	12:1	12:1	12:1	12:1	30:1	50:1	50:1	
Supply Voltage	9V	9V	9V	9V	9V	9V	9V	9V	9V	9V	9V	9V	9V	9V	
Operating Temp.	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 90% RH	0 ~ 50°C(32~120°F), 10 ~ 90% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 95% RH	0 ~ 50°C(32~120°F), 10 ~ 90% RH	0 ~ 50°C(32~120°F), 10 ~ 90% RH	0 ~ 50°C(32~120°F), 10 ~ 90% RH	
Storage Temp.	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	-10~60°C (14~140°F)	
Auto Power Off	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	Automatically after approx 6s.	
C/F Switchable	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Backlight	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Laser Sight Switchable	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	
Max/Min/Avg./Δ T	NO	YES	YES	NO	NO	YES	YES	YES	NO	YES	NO	YES	YES	YES	
10 Point Memory	NO	YES	YES	NO	NO	NO	YES	YES	NO	YES	NO	YES	YES	YES	
Audio Alarm	NO	YES	YES	NO	NO	NO	YES	YES	NO	YES	NO	YES	YES	YES	
Auto Measuring	NO	YES	YES	NO	NO	NO	YES	YES	NO	YES	NO	YES	YES	YES	
Thermocouple (K-Type)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	
Data Output (USB)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	
Dual Display	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES	YES	YES	
Tripod mount	NO	NO	NO	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	Option	
Size	204x63x55 mm	204x63x55 mm	204x63x55 mm	156x87x32 mm	156x87x32 mm	170x133x45 mm	170x133x45 mm	170x133x45 mm	170x133x45 mm	170x133x45 mm	170x133x45 mm	200x127x47 mm	200x127x47 mm	200x127x47 mm	
Weight	243 g	247 g	247 g	135 g	135 g	186 g	189 g	189 g	189 g	189 g	185 g	310 g	310g	340g	