

25 Years of Industrial Infrared Temperature Measurement
STEK MARATHON RATIO (2 COLOR) Radiation Pyrometer



Applications:
Metals processing
Molten metal/forging
Hot rolling mills
Rod/wire mills
Heat treating & annealing
Induction heating
Lightbulb and halogen lamp
production
Salt Bath
Glass melting
Semiconductor furnaces
Cement & lime kilns
Refuse burning
Carbon graphite production
Foundry & welding
Rubber & thick plastic

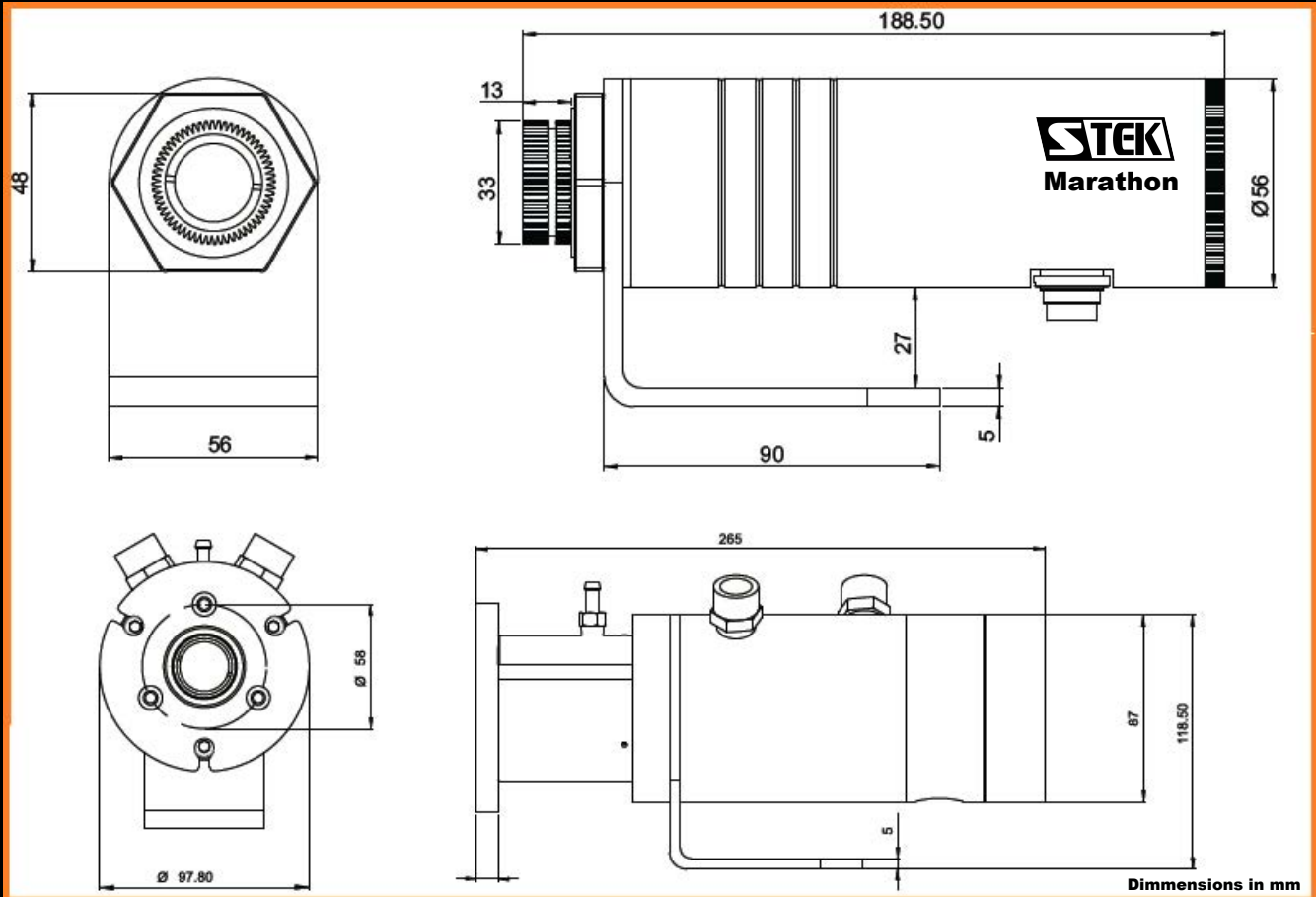


TECHNICAL SPECIFICATION STEK MARATHON RATIO (2 COLOR) PYROMETER

Model	STEK MARATHON RATIO SERIES
Temperature Range (Analog sub-range adjustable)	600°C - 1600°C (MODEL: STMR1SBSF) 800°C - 2500°C (MODEL: STMR1SCSF)
Spectral Range	0.7....1.15 μm
Photodetector Type	Si/Si
Distance to Spot Size Ratio	150:1 (600°C - 1600°C) 300:1 (800°C - 2500°C)
Emissivity (ϵ)	0.1....1.0 adjustable (Single color mode)
Emissivity Slope (ϵ_1 / ϵ_2)	0.75...1.25 slope adjustable (Two color mode)
Response Time	20 msec adjustable upto 10 sec
Accuracy	$\pm 0.5\%$ of the measured value + 1°C
Repeatability	0.1% of reading in °C + 1°C
Sighting Options	Laser Pilot Light(PL), Through The Lens (TL) & Video Module
Analog Output	0-20mA, 4-20mA (User selectable)
Digital Output	RS-485
Operating Temp. Range	0°C.....70°C
Storage Temp. Range	-20°C...70°C
Adjustable Parameters and Features via Software and Android app	Emissivity, Emissivity Slope, Response Time, Clear Time (Peak Picker), Analog Output, Analog Scale (Sub range), Sensor type (Switches b/w 2-color or single color), Switch off level, Unit Of Temperature(°C/°F), Communication mode (Comm.mode), Record feature, Relay set point & hysteresis, etc.
Adjustable Parameters and Features via Keypad	Emissivity, Emissivity Slope, Response Time, Clear Time (Peak Picker), Analog Output, Analog Scale (Sub range), Sensor type (Switches b/w 2-color or single color), Switch off level, Unit Of Temperature(°C/°F), Communication mode (Comm. mode), Relay set point & hysteresis, address, etc.
Relay output	One Relay output with hysteresis 60V DC / 42 AC RMS, 0.4 A
Power Supply	12V to 28V DC with reverse voltage protection
Power Consumption	Max 4.0 watt
Laser Power	<1 m watt (only PL model)
Protection Class	IP65
Housing	Stainless Steel
Isolation	Power supply,Digital output and Analog output are galvanically isolated against each other
Operating Humidity	10-95%, Non-Condensing Conditions
Weight & Dimensions	1200g, Dia= Ø 56mm; Length=188.5mm



Sensor Dimensions



Mounting Adaptor



Air Purge With Quartz Window



Mounting Adaptor with Cooling Jacket



Mounting Flange



Mounting Adaptor



Air / Nitrogen / Water Cooling Jacket