Industrial Infrared Temperature Measurement
Marathon MA / MR series , 1 / 2 color (Ratio) Series

2 Colour Ratio Temperature Measurement
600 to 3000 Deg C Range
Laser Aiming / View Finder
Galvanic Isolated Analog Output

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Model	STMA2MSC (Scope) STMA2ML Laser) STMA2MHSC (Scope) STMA2MHL Laser)	STMA3MSC(Scope) STMA3ML(Laser)	STMR1SBSC(Scope) STMR1SBL(Laser) STMR1SCSC(Scope) STMR1SCL(Laser)	STMR2SASC(Scope) STMR2SAL(Laser) STMR2SBSC(Scope) STMR2SBL(Laser)
Temperature Range (Analog sub-range adjustable)	250 to 1400ºC (STMA2M) / 250 to 1800 (STMA2MH) (Note Special Ranges between 250 to 1800ºC on Request)	70 to 800 (STMA3M)	600 to 1800ºC STMR1SBSC / STMR1SBL 1000 to 3000ºC STMR1SBSC / STMR1SBL	250 to 1000ºC STMR2SASC / STMR2SAL 250 to 1000ºC STMR2SBSC / STMR2SBL
Spectral Range	1.6µ	2.4µ	0.75µ / 1.15µ	1.5µ /1.6µ 2.4µ (3M model)
Single/ Two Color(Ratio)	Single Color	Single Color	Single/Two Color (Ratio)	Two Color Ratio
Detector Type	InGaAs	InSb	Si / Si	InGaAs / InGaAs
Distance to Spot Size Ratio	150: 1 SLR Focus (please refer Optical)	150: 1 SLR Focus (please refer Optical)	150: 1 STMR1SBSC/STMR1SBL 300:1 STMR1SCSC/STMR1SCL SLR Focus (please refer Optical)	150: 1 SLR Focus (please refer Optical)
Emissivity (ε)	0.1….1.0 adjustable	0.1….1.0 adjustable	0.1….1.0 adjustable 0.75…1.25 slope adjustable (Two color mode)	0.1….1.0 adjustable 0.75…1.25 slope adjustable (Two color
Response Time	2 msec adjustable upto 10 sec	2 msec adjustable upto 10 sec	2 msec adjustable upto 10 sec	2 msec adjustable upto 10
Accuracy	± 0.3% of the measured value	± 0.3% of the measured value	± 0.3% of the measured value	± 0.3% of the measured
Repeatability	0.1% of reading in °C + 1°C	0.1% of reading in °C + 1°C	0.1% of reading in °C + 1°C	0.1% of reading in °C +
Sighting Options	Laser Aiming (L) View Finder (SC) Video Output(V)	Laser Aiming (L) View Finder (SC) Video Output(V)	Laser Aiming (L) View Finder (SC) Video Output(V)	Laser Aiming (L) View Finder (SC) Video Output(V)
Analog Output	0-20mA/4-20mA Range Scaleable	0-20mA/4-20mA Range Scaleable	0-20mA/4-20mA Range Scaleable	0-20mA/4-20mA Range Scaleable
Digital Output	RS-485	RS-485	RS-485	RS-485
Operating Temp.	0°C…….70°C	0°C…….70°C	0°C…….70°C	0°C…….70°C
Storage Temp.	-20°C…70°C	-20°C…70°C	-20°C…70°C	-20°C…70°C
Adjustable Parameters and Features via Keypad, GPCM Controller And software	Emissivity, Response Time, Clear Time (Peak Picker), Analog Output, Analog Scale (Sub range), Unit Of Temperature(°C/°F), Communication mode (Comm.mode), Record feature, Relay set point & hysteresis, etc.	Emissivity, Response Time, Clear Time (Peak Picker), Analog Output, Analog Scale (Sub range), Unit Of Temperature(°C/°F), Communication mode (Comm.mode), Record feature, Relay set point & hysteresis, etc.	Emissivity, Response Time, Clear Time (Peak Picker), Analog Output, Analog Scale (Sub range), Unit Of Temperature(°C/°F), Communication mode (Comm.mode), Record feature, Relay set point & hysteresis, etc.	Emissivity, Response Time, Clear Time (Peak Picker), Analog Output, Analog Scale (Sub range), Unit Of Temperature(°C/°F), Communication mode (Comm.mode), Record feature, Relay set point &
Relay output	One Relay output with hysteresis 60V DC / 42 AC RMS, 0.4 A	One Relay output with hysteresis 60V DC / 42 AC RMS, 0.4 A	One Relay output with hysteresis 60V DC / 42 AC RMS, 0.4 A	One Relay output with hysteresis 60V DC / 42 AC RMS, 0.4 A
Power Supply	12V to 28V DC with reverse voltage protection	12V to 28V DC with reverse voltage protection	12V to 28V DC with reverse voltage protection	12V to 28V DC with reverse voltage protection
Power Consumption	Max 4.0 watt	Max 4.0 watt	Max 4.0 watt	Max 4.0 watt
Laser Power	<1 m watt (only PL model)	<1 m watt (only PL model)	<1 m watt (only PL model)	<1 m watt (only PL model)
Protection Class	IP65	IP65	IP65	IP65
Housing	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Isolation	Power supply, Digital output and Analog output are galvanic ally isolated against each other	Power supply, Digital output and Analog output are galvanic ally isolated against each other	Power supply, Digital output and Analog output are galvanic ally isolated against each other	Power supply, Digital output and Analog output are galvanic ally isolated against
Operating Humidity	10-95%, Non-Condensing Conditions	10-95%, Non-Condensing Conditions	10-95%, Non-Condensing Conditions	10-95%, Non-Condensing Conditions
Weight & Dimensions	1200g Dia= Ø 56mm; Length=188.5mm	1200g Dia= Ø 56mm; Length=188.5mm	1200g Dia= Ø 56mm; Length=188.5mm	1200g Dia= Ø 56mm; Length=188.5mm

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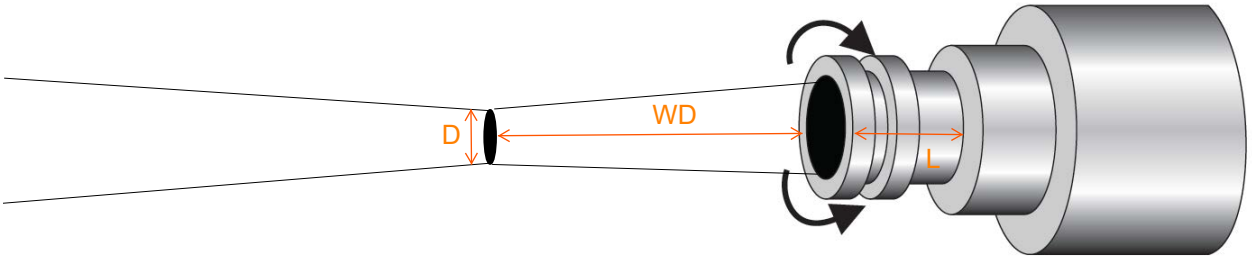
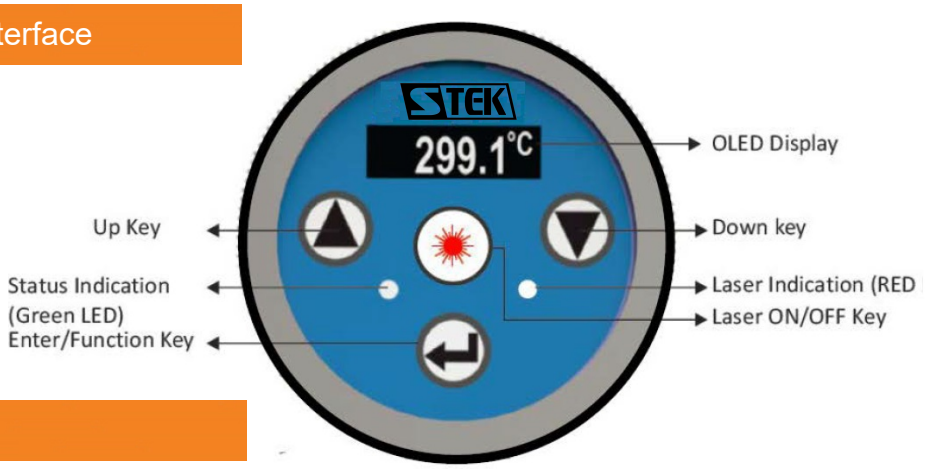
Optics

Focused working distances(WD mm)	Length of Lens Extended from Aperture(L mm)	Spot Dia(Dmm)* 150:1	Spot Dia(D mm)* 300:1
500	13.20	3.40	1.70
700	8.70	4.70	2.70
1000	5.70	6.70	3.40
2000	2.40	13.40	6.70
5000	0.50	33.40	16.70
9000	0	60.00	30.00

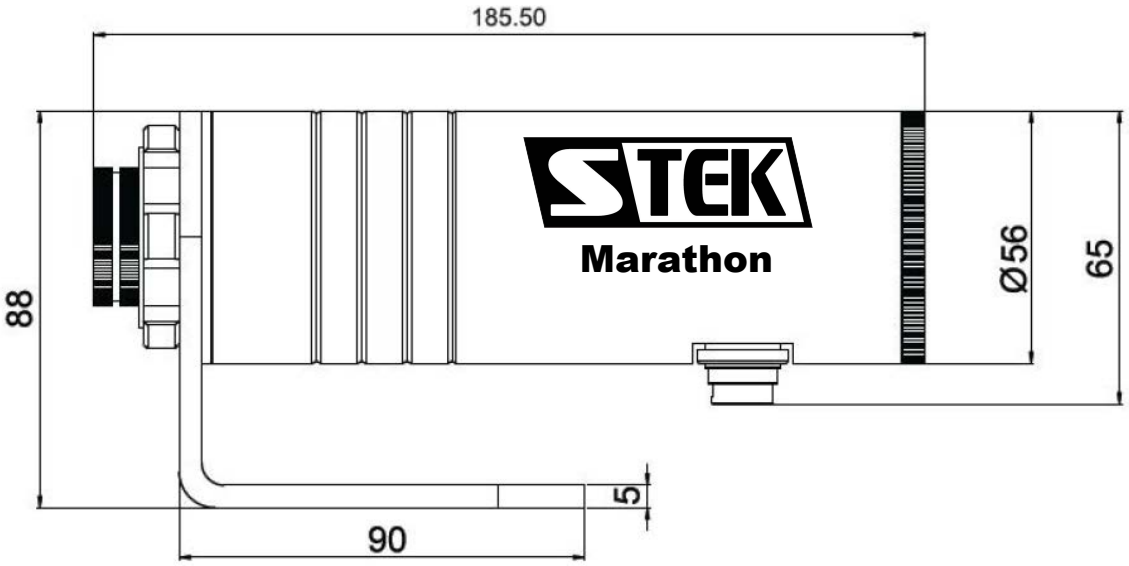
*Special Optics On Request



Back Panel User Interface



Dimmensions



Optional Accessories