Infrared Temperature Sensors For Metal Temperature Measurements

Low Wavelength 1M(1µ)/1M(1.6µ)/3M(2.4µ)

Features

- Wide Temperature range : 60℃ ~ 1600℃
- Superior optical resolution up to 150:1
- Spot sizes down to 2.3 mm
- 5 ms response time
- Coaxial Red Laser aiming
- 4 ~ 20mA output
- Digital RS485 communications
- Simultaneous analog and digital outputs
- Rugged IP 65 stainless steel housing
- Adjustable signal processing
- Program and calibrate all Pyrometer Features via Raytek GPCM Controller with 2 set points and relays

General Specifications

Environmental Rating	: IP 65 (NEMA - 4)
Ambient Temperature	: 0ºC to 70ºC
Storage Temperature	: -20ºC to 80ºC
Relative Humidity non-condensing	: 10 to 95%,
Cable Temperature	: -20ºC to 80ºC
Weight	: 280g (2m cable)

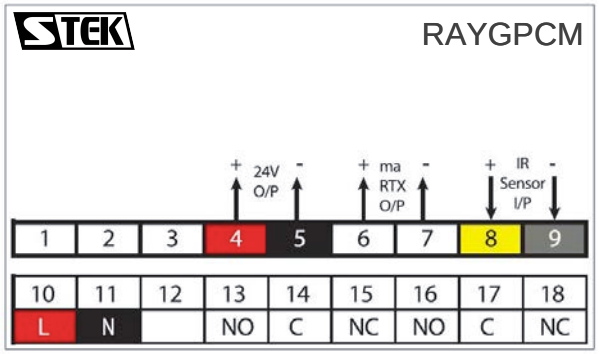
Sensor Electrical Specifications

Analog Output	: 4~20mA (4-wire)
Digital Output	: RS485 (2-wire)
Maximum Loop Resistance	: 500 Ω
Power Supply	: 24 VDC ± 20%
Current Draw	: max. 100 mA
Cable Length	: 2 m (standard), 5m or 10m

GPCM Controller Specifications

Input	: RS485 (2-wire) from Raytek MI sensor
Response Time	: 10msec to any change in Temperature
Emissivity	: 0.100 ~ 1.000
Signal processing	: peak hold, valley hold, average
Retransmission	: 4-20/0-20mA (scale able)
Alarm	: 2 set points with potential free contacts 5 Amp
Calibration Offset	: 0-100 ºC
Digital Output	: RS485 (2-wire)
Auxiliary Power	: 110-230V ACstance
Output Power	: 24 VDC
Output Power Current	: max. 100 mA
Size	: 48 x 96 mm

Controller GCM Terminals

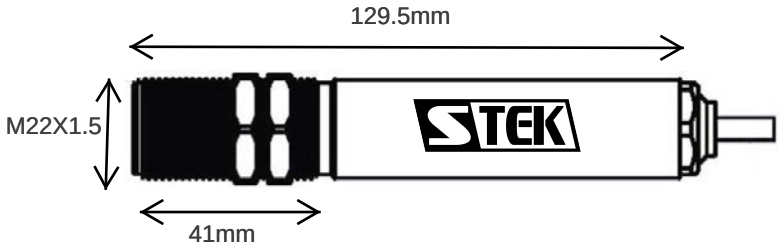


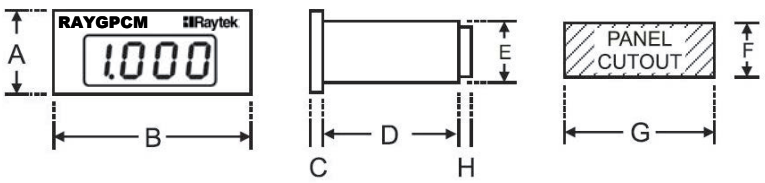
Measurement Specifications

Temperature Range	: 1M 600ºC ~ 1600ºC (1112ºF to 2912ºF) 2M 300ºC ~ 1300ºC (572ºF to 2372ºF) 3M 100ºC ~ 600ºC (212ºF to 1112ºF) 3ML 60ºC ~ 400ºC (140ºF to 752ºF)
Spectral Response	: 1M 150 : 1 2M 150 : 1 3M 60 : 1 3ML 40 : 1
Optics Resolution (90% energy)	: 1M-1µm, 2M-1.6µm, 3M/3ML: 2.3µm
Accuracy*1	: ±(0.5% of reading +2ºC)
Repeatability*1	±(0.3% of reading +1ºC)
Response Time (95% signal)	5 ms
Emissivity	: 0.100 ~ 1.000 (Adjustable from GPCM Controller)
Temperature Resolution	: 0.1ºC
Signal processing	: peak hold, valley hold, average Adjustable from GPCM Controller)
Software	: Raytek IR online

*1 At 23ºC ± 5ºC, emissivity = 1.00

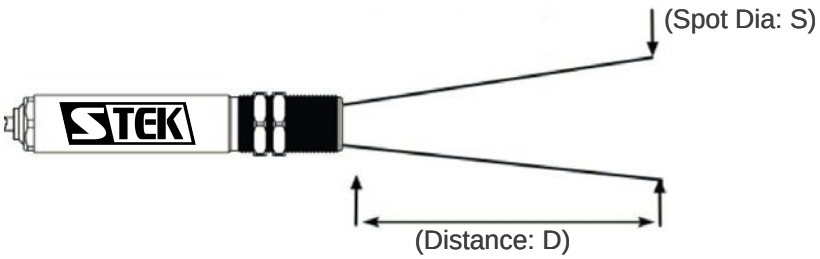
Dimmensions





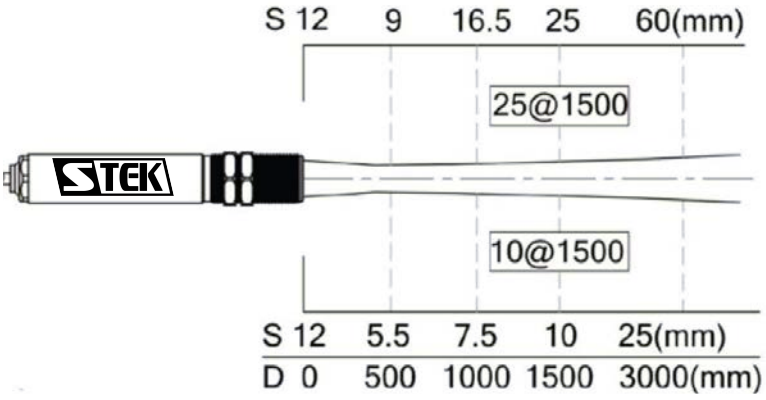
Dim / Model	A	B	C	D	E	F	G	H
RAYGPCM	48	96	10	45	43	44	92	9

Optics, Distance: Spot (D:S)



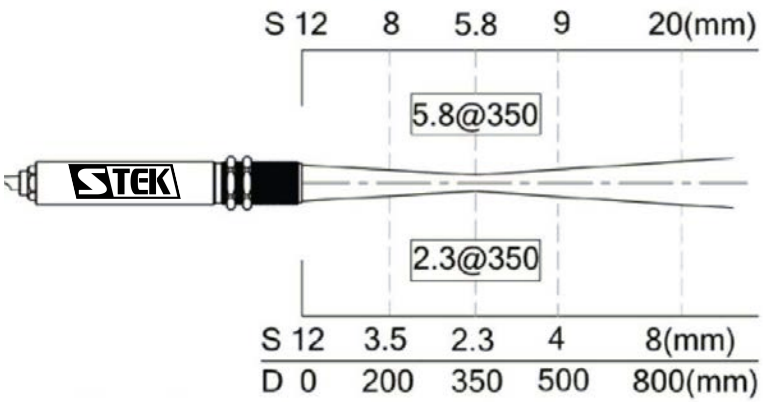
D : Distance between sensor lens and object of Temperature Measurement
S : Diameter of spot area of which Temperature is Measured
NOTE: Ensure that object of which temperature needs to be measured only occupies the spot diameter

RAYMI3MSF, D:S = 60 : 1, FAR FIELD D:S = 40 : 1



RAYMI1MSF, D:S = 150 :1, FAR FIELD D: S = 80:1
RAYMI2MSF

RAYMI3MCF, D:S = 60 : 1, FAR FILED D:S = 15 : 1



RAYMI1MCF, D:S = 150 : 1, FAR FIELD D:S = 30 :1
RAYMI2MCF

Accessories Optional :

Lens Air Purge Collar

Water/Air/Nitrogen Cooling Jacket

Adjustable Bracket

Quartz Protective Window

IP65 Junction Box