

Intelligent High Performance IR Pyrometers

METTLE Series

METTLE Series Infrared pyrometers are high performance and intelligent, with built-in stainless steel (SS 304) casing and high reliable circuit design (low temperature drift, full digital measurement design, ambient temperature compensation, real-time signal processing, software code optimization) to meet critical application environments.

Common Features :

- Manually adjustable focus lens (standard focal length is from 0.35m to infinity, a near focal length is adjustable from 0.2m to 0.5m)
- PID constant temperature control is adopted for the detector, with full range temperature compensation to avoid influence of ambient temperature on the measuring accuracy
- High brightness LED light source or visible green eyepiece aiming, clearly display the location and size of measured target.
- Industrial grade OLED screen as display interface
- 2 independent analog outputs, 2 alarm outputs, 1channel level output and 1 channel RS485 communication interface
- Anti- jamming design of software and hardware improves system stability, and can resist 2500V DC burst interference
- Supports bus cascade connection of up to 26 pyrometers, and realize network control through PC

Accessories :

- 1) Air Purge Unit - Model : MAA - 1
- 2) Water Cooling Jacket (with integral air purge) - Model : MWJ – 1

Two Color Ratio Pyrometers

- Best suited for medium - high temperature applications such as wire rod, hot rolled plate, forging, casting, cement kiln, heat treatment, induction heating, melting glass, vacuum furnace etc.
- Ideal choice for harsh environments like moisture, dust, target size change, partial blockage and emissivity change, even if the detection signal attenuates 95%, the temperature measurement results will not be affected.



Technical Parameters

Model	R - SD/6016	R - SD/6018	R - SD/7025	R - ID/2512	R - ID/3514	R - ID/4026
Temperature Range	600°C - 1600°C	600°C - 1800°C	700°C - 2500°C	250°C - 1200°C	350°C - 1400°C	400°C - 2600°C
Detector	Si (Laminated Silicon)			Laminated InGaAs		
Spectral Response	0.7 - 1.08 μm and 1.08μm			0.9 - 1.7 μm and 1.7 μm		
Accuracy	±0.5% R (Measured value)					
Repeatability	±2°C					
Temperature Resolution	0.1°C					
*Optical Resolution (D:S)	60 : 1	100 : 1	200 : 1	30 : 1	60 : 1	100:1
#Measuring Distance	Standard focal length: Adjustable from 0.35m to Infinity, Near focal length : 0.2m - 0.5m (optional)					

Model	R - SD/6016	R - SD/6018	R - SD/7025	R - ID/2512	R - ID/3514	R - ID/4026
Emissivity (1 - color Coefficient)	0.10 to 1.100, adjustable in 0.001 increments (single colour mode)					
E - Slope (2 - color Coefficient)	0.85 to 1.150 , adjustable in 0.001 increments (two colour mode)					
Response Time	Fastest 5ms, 5ms - 99.99s Adjustable					
Signal processing	Peak / Valley / Average Temperature Values, Ambient temperature High/Low Alarm, one - color and two - color mode selection, Power down protection					
Outputs	Group 1 : Multiple Analog Outputs :16 bit (4mA - 20mA, 0mA - 20mA, 0V - 5V, 0V - 10V) optional Group 2 : Analog Output : 4mA - 20mA Alarms output: Upper or Lower temperature limit alarm; Photo MOS relay PNP level output : Current output 100mA, with overload protection					
Display	Industrial - grade self - luminous OLED display					
Power Input	DC (20 - 30) V , with over voltage, over current and short circuit protection					
Aiming(focusing) Method	Green visible aiming laser or eyepiece					
Operating Temperature	Without water cooling : - 30°C to +65°C With water cooling : - 30°C to +120°C					
Environment Protection	IP65					

**Consult us for customized optical resolutions*

Consult us before ordering

Single Wavelength Pyrometers

- Narrow - band pyrometers determines the temperature by detecting the radiant energy that occurs in a narrow wavelength range of an object.



Technical Parameters

Model	S - SD/6020	S - SD/7025	S - ID/ 1508	S - ID/ 2012	S - ID/3014	S - ID/2516	S - ID/3522
Temperature Range	600 - 2000°C	700 - 2500°C	150 - 800°C	200 - 1200°C	300 - 1400°C	250 - 1600°C	350 - 2200°C
Detector	Si (silicon photocell)			InGaAs			
Spectral Response	0.85 - 1.1 µm		1.45 - 2.1 µm		1.45 - 1.7 µm		
Accuracy	±0.5% R (Measured value)						
Repeatability	±2°C						
Temperature Resolution	0.1°C						
Optical Resolution (D:S)	100:1	200:1	100:1	100:1	100:1	60:1	200:1
#Measuring Distance	Standard focal length : adjustable from 0.35m to infinity ; Near focal length : 0.2m - 0.5m						
Emissivity	0.100 - 1.100, Adjustable in 0.001 increment						
Response Time	Fastest: 5ms, 5ms - 99.99s Adjustable						
Signal processing	Peak / Valley / Average Temperature Values, Ambient temperature High/Low Alarm, Power down protection						
Outputs	Group1: Multiple analog outputs :16bit (4mA - 20mA, 0mA - 20mA, 0V - 5V, 0V - 10V, switchable Gourp2: Analog output : 4mA - 20mA, Digital Output : RS 485,with functions of parameters modification Alarms output: Upper or Lower temperature limit alarm ; Photo MOS relay PNP level output : Current output 100mA,with overload protection						
Display	Industrial - grade self - luminous OLED display						
Power Input	DC (20 - 30) V , with over voltage, over current and short circuit protection						
Aiming(focusing) Method	Green visible aiming laser or eyepiece						
Operating Temperature	Without water cooling: - 20°C to +60°C ; With water cooling: - 20°C to +200°C						
Environment Protection	IP65						

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Optional Accessories

Air Purge Accessory - Model: MAA-1

Air purge Accessory, Model MAA-1 is designed to effectively prevent deposition of dust in the lens assembly of the pyrometer and is suitable for situations where ambient temperature is not high.

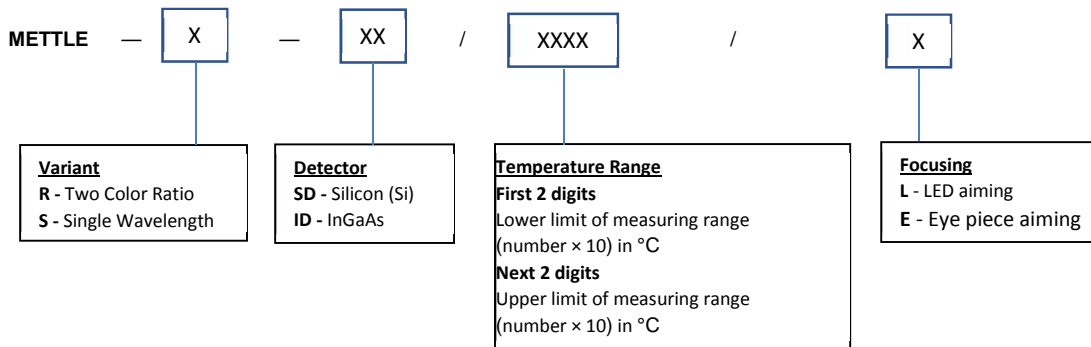


Water Cooling and Air Purge Jacket - Model: MWJ - 1

Water cooling jacket (fitted with air purge) is suitable for harsh working conditions (more dust, higher ambient temperature). It is designed to effectively prevent deposition of dust in the lens assembly of the pyrometer as well to withstand the ambient temperature from -20°C to +200°C



Model Identification /Ordering Chart



Manufactured by

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AN ISO 9001:2015 CERTIFIED COMPANY

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Specifications subject to change owing to continuous development. Contact us for latest Datasheet.



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