



IS 12-Si

高精度、快速、数字式

从350 开始的的非接触式测温
(对IS12 有关数据的补充)

- ◆ 特别为测量硅晶体的温度设计
- ◆ 从350...1800 分有四个测温范围
- ◆ 光谱范围近远红外线窄带
专门用与测量硅晶体的温度
- ◆ 带有6个固定镜头和三个可变镜头
- ◆ 响应时间10ms,可调至10s



可变镜头光学参数

测量距离 a [mm]	测量光点直径 M [mm] 400 ... 1300°C
可变镜头1 275 ... 520	2,3 ... 5
可变镜头2 385 ... 1125	3,1 ... 10,5
可变镜头3 540 ... 9000	4 ... 80
孔径 D [mm]:	13,5 ... 17

固定镜头光学参数

测量距离 a [mm]	测量光点直径 M [mm]		
	MB 9 400 ... 900°C	MB 10 L * 350 ... 1000°C	MB 18 L 500 ... 1800°C
80	1,2	-	0,7
120	1,4	2,2	0,6
250	2,4	4,4	0,8
660	6,2	10,5	2
1300	12	20	3,8
5600	50	86	15
孔径 D [mm]:	19	27	20

* MB 12 L 配有特殊镜头

订货号(订货时请给出所需的镜头)

3 840 300 400-1300 , IS12-Si 带有瞄准器和激光瞄准器 可变镜头。 3 840 310 400-900 , IS12-Si
3 854 270 350-1000 IS10-Si 带有瞄准器和激光瞄准器 固定镜头。 3 840 330 500-1800 , IS12-Si

IS12-Si 是IS12的补充型号专门为测量硅晶体的温度而设计的远红外非接触式测温仪。此款测温仪应用了近红外线窄带设计,并带有一个窄带滤波器,这样就可以实现从350 开始测量透红外线的硅晶体的温度。

IS10-AI在实际应用中对测量范围周围的外部光非常敏感,在升温过程中这种敏感性会越来越明显。因此在使用这款测温仪进行温度测量时要注意:刚开始在低温段进行测量时可以通过用隔绝光线的方法来避免光线对测量结果的影响。

X Non-contact thermometry best done with *INFRATHERM* pyrometers



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IS 10-Si

Highly precise, completely digital, fast

Digital high-end pyrometer for non-contact temperature measurement of silicon wafers from 350°C (additional data sheet to IS 10)

- ◆ For measurements of silicon wafers
- ◆ 4 Temperature ranges between 350 and 1800°C
- ◆ Spectral range: narrow band in the near infrared, especially for measurements of silicon
- ◆ 6 fixed optics and 3 focusable optics
- ◆ Response time 10 ms, adjustable up to 10 s



Optical data of focusable optics:

Measuring distance a [mm]	Spot size M [mm] 400 ... 1300°C
Focusable optics 1:	
275 ... 520	2.3 ... 5
Focusable optics 2:	
385 ... 1125	3.1 ... 10.5
Focusable optics 3:	
540 ... 9000	4 ... 80
Aperture D [mm]:	13.5 ... 17

Optical data of fixed optics:

Measuring distance a [mm]	Spot size M [mm]		
	MB 9 400 ... 900°C	MB 10 L * 350 ... 1000°C	MB 18 L 500 ... 1800°C
80	1.2	-	0.7
120	1.4	2.2	0.6
250	2.4	4.4	0.8
660	6.2	10.5	2
1300	12	20	3.8
5600	50	86	15
Aperture D [mm]:	19	27	20

* MB 10 L is equipped with special lenses

Reference numbers (specify an optics when ordering):

3 854 260 IS10-Si with thru-lens view finder and targeting light, RS232
3 854 270 IS10-Si with thru-lens view finder and targeting light, RS485

The **IS 10-Si** is a special version of the IS 10, developed for the temperature measurement of silicon wafers. The pyrometer is equipped with a optical narrow band filter in the near infrared. This enables a reliable measurement of thin silicon from 350°C which otherwise is

transparent for infrared radiation. In this special spectral range the emissivity of silicon is 67% and it is almost independent from temperatures. This allows the **IS 10-Si** to detect the correct temperature of the silicon wafer.

In the beginning of the temperature range the **IS 10-Si** is sensitive against light. This sensitivity decreases with increasing temperature. In applications which require the low temperatures at the beginning of the range this effect can be avoided by screening against the light.