

Special version of IPE 140 with a spectral range of 3.9 µm

IPE 140/39
(Addendum to IPE 140)



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- Temperature ranges between 20 ... 1800°C
- Measurement through flames and combustion gas without influencing the measurement
- Penetrating measurement into glass
- Reduction of emissivity errors



Technical Data (different from IPE 140):

Temperature range:	20 ... 700°C (MB 7) 75 ... 1200°C (MB 12) 300 ... 1450°C (MB 14.5S) 500 ... 1800°C (MB 18)
Spectral range:	3.9 µm

Reference Numbers:

Temp. range:	With laser target. light	With view finder
MB 7	3 875 840	3 875 850
MB 12	3 875 760	3 875 770
MB 14.5	3 875 860	3 875 870
MB 18	3 875 960	–

	Measuring distance a	Spot size diameter M_{90}		
		MB 7	MB 12	MB 14.5S MB 18
Optics 1-PE	105 mm	2.4 mm	0.9 mm	0.7 mm
	120 mm	2.9 mm	1 mm	0.8 mm
	150 mm	4.1 mm	1.4 mm	1 mm
Optics 2-PE	200 mm	4.2 mm	1.4 mm	1.1 mm
	260 mm	5.7 mm	1.8 mm	1.3 mm
	440 mm	11.4 mm	3.5 mm	2.5 mm
Optics 3-PE	345 mm	6.8 mm	2.3 mm	1.7 mm
	1000 mm	23 mm	7.1 mm	5 mm
	4300 mm	105 mm	32 mm	22 mm

The **IPE 140/39** is a special pyrometer for non-contact temperature measurement of metal parts in flame heated furnaces. Like the basic IPE 140, the IPE 140/39 is a highly accurate digital pyrometer.

The narrow spectral range of 3.9 µm avoids the influence of humidity and

CO₂ and enables a correct measurement through flames and combustion gases. Also humidity and CO₂ do not have any influence on measurements with long measuring distances.

Another application is the measurement of glass if a small penetration

into the glass is necessary (e.g. glass drop). Measurement errors caused by partially cooled down surfaces can be avoided.

For optimal match of the instrument to the application 3 different focusable optics with extremely small spot sizes are available.