Fast measurement, fast controlling, fast switching

High Speed Infrared Thermometer

KMGA 740 - KMGA 740-LO

High Speed temperature measuring station with USB for research & development departments



The **KLEIBER KMGA 740/ KMGA 740-LO** temperature measuring station represents the latest in microprocessor technology.

The pyrometer is designed to record and monitor infrared temperature measuring processes **especially in research and development areas**.

Its main features are very wide measuring ranges (e.g. 350 to 3500° C) and a response time of just 10 µs (t_{as}).

The device contains a KLEIBER High Speed pyrometer (with or without fibre optics cable), display, power supply and a **USB interface**, in a bench unit with handle, plus easy to use evaluation software running on a PC.

The pyrometer connects to the rear of the bench unit and the measuring station connects to the PC via the USB interface. A trigger input and measuring output of 0(4)...20 mA are also available.

The **user friendly evaluation software** displays the temperature curve on the PC screen. Within a freely adjustable time scale, the minimum, maximum and average temperatures are displayed graphically.

The areas of interest can be selected by setting locators within the display. The resolution of the software enables 1/100°C to be visible.

Two display windows illustrate the complete process. The first display shows the full measuring curve and the second goes into more detail. User notes and the graphics of the temperature measuring process can be stored as well as printed out.

To eliminate noise, the software features the option to produce the

mean value by setting a number of samples. The scan time is adjustable in steps of 10 μ s. Furthermore you can set up a recording time.

Modes of operation:

- Normal: Data acquisition occurs according to the sampling and acquisition time.
- Gate: Data acquisition occurs only at H-Level on trigger input.
- Trigger: With each L-H-rising edge at the trigger input, one value will be displayed.
- **Temperature trigger**: Record only on rise above or fall below a preset temperature level.

Applications:

- Research and Development
 - Plasma measurment
 - LCD production

Measuring Station

KLEIBER combines decades of experience with a passion for cutting-edge technology.

Technical Data KMGA 740 - KMGA 740-LO

Product:	KMGA 740*	KMGA 740-LO*			
Temperature range:	350 3500°C	350 3500°C			
Spectral range:	2.0 2.5 μm	2.0 2.5 μm			
Order no.:	4 330 020	4 330 030			

*Measuring ranges possible as for KLEIBER 740

Output signal:	0 (4) 20 mA linear (please specify on order) USB - connection to PC
Accuracy:	0.75 % of measured value (25°C, ϵ =1, $t_{_{99}}$ =1s)
Repeatability:	< 0.3% of measured value (25°C, ϵ =1, $t_{_{99}}$ =1s)
Response time t ₉₉ :	10 μs
Emissivity ε :	10 100% (adjustable on digital display or via software)
Aiming:	LED- pilot light
Trigger input:	TTL-level, U _{max} = 15 V
Power Supply:	230 V AC, 50 60 Hz , as option 115 240 V available (please specify on order)
Measurement resolution:	0.1 °C (1°C display resolution)
Safety class:	IP 54 (pyrometer), IP 20 (digital display)
Operating temperature:	0 40°C
CE-Mark:	according to EU-Regulations
Weight:	approx. 6.3 kg
PC requirements :	USB 2.0 interface CPU minimal: 1,0 GHz, 256 MB RAM, Windows 98 or better CPU recommended: 1,5 GHz. 512 MB RAM, Windows 2000, Windows XP
Scope of delivery:	Pyrometer with or without fibre optics, bench unit, USB cable, measurement cable, data cable, power cord, CD-ROM with evaluation software, inspection sheet, user manual

Vario optics

Distance (mm):	450	600	800	1000	1200	1400	1600	1800	2000	2500	3000
Spot size (mm)	2.5	4.0	6.0	8.0	10.5	11.5	13.0	14.0	15.0	20.0	28.0

Optical heads (* specifications in mm)

Standard optics	Distance*	Spot size Ø*	Fibre cable	Meas. ranges	Aperture*
LVO 25	80 300	1.6 4.3	blue	all	18
LVO 35	250 1000	3.5 11.0	blue	all	28
Special optics					
LVO 25-S3	76	0.3	red	> 400 °C	17
LVA 25	110 800	0.8 5.0	red	all	17

Fibre optics cable: available lenght between 1,5 and 25 m with stainless steel clad or PTFE clad as well as vacuum lead through special fibre optics cable

Accessories:

: The accessories range of the KMGA 740/ KMGA 740-LO corresponds to the KLEIBER 740 and KLEIBER 740-LO.

上海麦兴仪器设备有限公司

Shanghai MaxSun Industrial Co., Ltd. 地址:上海市浦东新区张杨路188号汤臣中心A座 邮编:200122 电话:(86 21) 5888 6718 / 133 8186 8102 传真:(86 21) 5888 7876 邮箱:mx@imaxsun.com

麦兴(中国)有限公司 MaxSun (China) Limited.

地址:香港湾仔告士打道151号国卫中心11楼 电话:(852) 2836 8361

- 传真:(852) 3011 5863
- 邮箱:mx@imaxsun.com