

CellaTemp® PQ 21AF2 Pyrometer



- Sub-ranges from +400°C ~ +1400°C
- Bright LED display
- Precision optics with broadband anti-reflection coating; parallax-free viewing
- Analogue output
- Configurable via USB interface
- LED spot light
- Focusable optics



KELLER H.C.W.
A **keyria** COMPANY

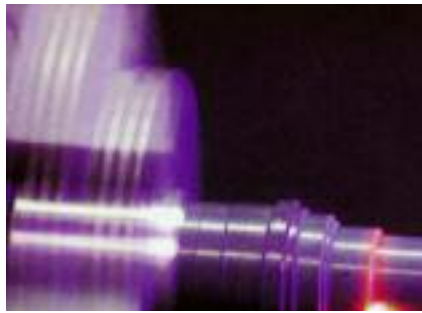
CellaTemp® PQ

Application Examples



Moving or difficult-to-access objects

Immediate temperature readings for process monitoring and quality control of textiles, paper, coated sheet metals and plastic films



Laser applications

Purpose-built pyrometer model is resistant to diode laser radiation to provide fast temperature detection and monitoring



Continuous casting of steel, rolling mills

Quick temperature detection of slab products and rolled steel plates



Resin extruders and moulding machines

Temperature monitoring during the plastic bottle manufacturing process



Cement and asphalt Industry

Provide evidence of temperature during the production and treatment process as a quality control measure



Annealing furnaces, tunnel kilns, combustion plants

Nonwearing measuring system for quick and exact temperature detection of the fired products to achieve high kiln/furnace efficiency



Heat treatment of metals

Detection and optimal control of object temperature during induction heating processes



Rotary kilns

Continuous monitoring of the kiln shell temperature



Glass industry

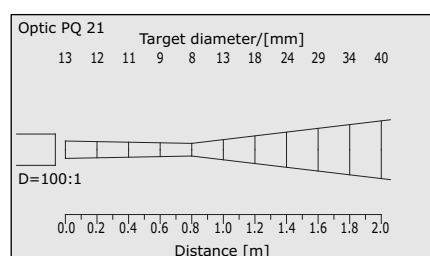
Special pyrometers accurately measure the surface temperature during plate glass and glassware manufacturing

Technical Data

Pyrometer Series CellaTemp® PQ

Version	High Temperature						
Type	PQ 21 ...						
Distance ratio	100:1						
Focal distance	800 mm						
Ranges							
	AF2:	+400 °C - +1400 °C					
Sensor	photodiode						
Spectral range	1.0 – 1.7 μm						
Target marker							
Uncertainty (at ε=1 and Tu=+23 °C)	0.5 % of reading at least 4 K						
Repeatability	1 K						
Response time t90	≤ 2 ms for T > +600 °C						
Resolution	≤ 0.45 K						
Length of enclosure A	149 mm						
Length of thread B	66 mm						

Target Diagrams¹⁾

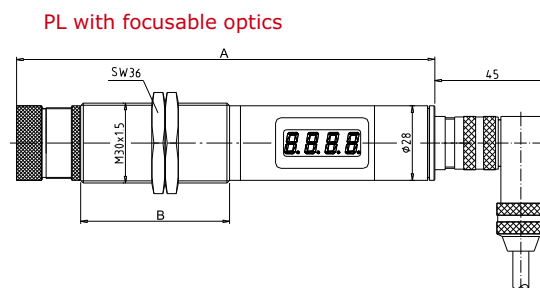
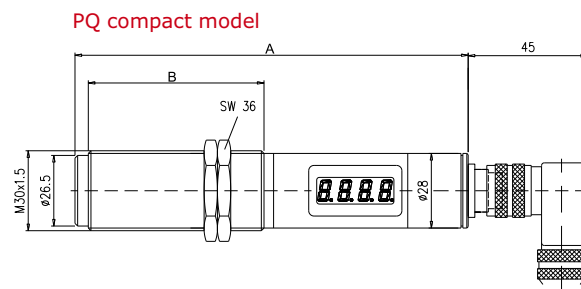


Common Specifications

Analogue output	0 (4) – 20 mA linear, switchable, scalable ¹⁾	
Load	max. 500 Ohm	
Linearisation	Digital via microcontroller	
Ambient temperature	0 – +65 °C (without cooling accessory)	
Overheating control	Output switches to > 20.5 mA when internal temperature exceeds 80 °C	
Storage temperature	-20 – +80 °C	
LED display	4-digit (digit height 8 mm)	
Power supply	24 V DC +10 %/-20 % current consumption ≤ 50 mA ripple ≤ 200 mV	
Permissible humidity	95 % RH (non-condensing)	
Enclosure	stainless steel	
Length of enclosure A	112 – 202 mm	
Mounting	with outer thread M 30 x 1.5	
Connection	via plug	
Weight	approx. 0.35 kg	
Protection	IP 65 (DIN 40050) when plug is connected	
Emissivity ϵ	Setting	Externally via 8-bit cable (binary signal, static)
	Range	$\epsilon = 0.100 - 0.996$
	Increments	0.0039

1) available with an optional VK 11/C-USB PC connection box

Dimensions



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Permissible humidity	95 % RH (non-condensing)	
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