

# PSC-T54U

## Infrared Pyrometer for Glass Industry Applications

- Designed for non-contact temperature measurement of ultra-thin glass < 1mm thickness
- Temperature Range: 350° to 1200°C
- High Resolution Optics – Field of View 70:1
- Compact, Rugged Stainless Steel Housing with Protective Hardware for Harsh Environments
- Digital RS-485 and Analog 4-20mA Interfaces for Ease of Installation in Existing Measurement & Control Systems
- Worldwide Application Specialist Support



The digital PSC-T54U is designed specifically for glass surface applications. Offering a wide temperature range from 350° to 1200°C, it is essential for thin glass surface measurement.

The robust and compact stainless steel housing ensures operation under even the most difficult ambient conditions.

With a minimum response time of only 60 ms, the PSC-T54U is ideal for fast measuring tasks and spot sizes from 5mm.

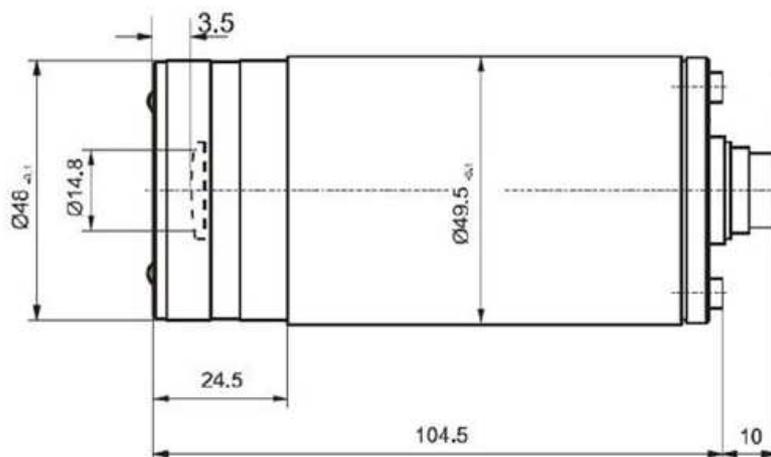
The standard 0/4 to 20 mA linear output signal allows seamless integration into existing measurement and control systems. The PSC-T54U boasts a galvanically isolated RS-485 interface and therefore is bus-compatible and uses Modbus RTU protocol.

PSC-Spot software enables simple parameter adjustment of emissivity, sub temperature ranges, response time and data storage when joined to a PC through an RS-485 to USB connection.

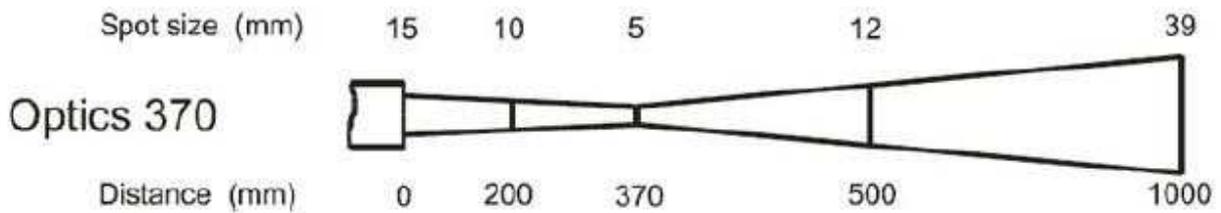
## PSC-T54U Specifications

Temperature Range	350° to 1200°C (662° to 2192°F)
Sub Temperature Ranges	Adjustable via RS-485 Interface Within Overall Temperature Range, Minimum Span 50°C
Spectral Range	7.8µm
Distance Ratio	Approximately 70:1 5.3mm at 370mm
Accuracy	0.6% of Measured Value in °C or 1K
Reproducibility	0.3% of Measured Value in °C or 0.5K
NETD	<0.15K
Response Time (t90)	60 ms (min.), Adjustable via RS-485 with PSC Spot Software
Emissivity	0.200 to 1.000, Adjustable via RS-485
Peak/Valley Picker	Maximum/minimum data storage, Adjustable via RS-485
Output	0/4 to 20 mA, Temperature Linear, Max Load 700 Ω
Interface	RS-485 (galvanically isolated), half duplex, max. baud rate 115 kBd, data protocol <b>Modbus</b> RTU
Alarm Relay	1 opto relay, R <sub>Load</sub> mind. 48 Ω (galvanically isolated) adjustable within temperature range
Software	PSC Spot for Windows®
Parameters	Emissivity, Response Time, Data Storage, Sub Temperature Range, Transmissivity, Ambient Radiation, adjustable via RS-485
Power Requirement	24 V DC ±25%, Residual ripple 500 mV
Power Consumption	Max. 1.5W
Operating Temperature	0° to 70°C (32° to 158°F)
Storage Temperature	-20°C to 70°C (-4° to 158°F)
Weight	Approx. 600g (1.32 lb.)
Housing	Stainless Steel Round Housing with Connector
Dimensions	Length: Approx. 105mm Diameter : 50mm
Protection Class Rating	IP 65 (According to DIN EN 60529 and DIN 40050)
CE Symbol	According to EU Regulations (EN 50 011)
Standard Equipment	PSC-T54U, Operation Manual, Inspection Sheet, PSC Spot for Windows® Software (Without Connection Cable – Must Be Ordered Separately.)

### Dimensions in mm



## Optical Field of View (FOV)



## PSC-T54U Accessories



Stainless Steel Cooling Jacket



Air Purge



Removable Sealed Window



Adjustable Mounting Bracket

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