

PSC-SSSi-LT22



PRECISE NON-CONTACT TEMPERATURE MEASUREMENT PYROMETER

OVERVIEW

The PSC-SSSi-LT22 Pyrometer is the next generation of industrial infrared temperature measurement technology. It combines proven reliability with modern connectivity for precise non-contact temperature monitoring in industrial settings, and is the industrial standard for non-contact temperature sensing.

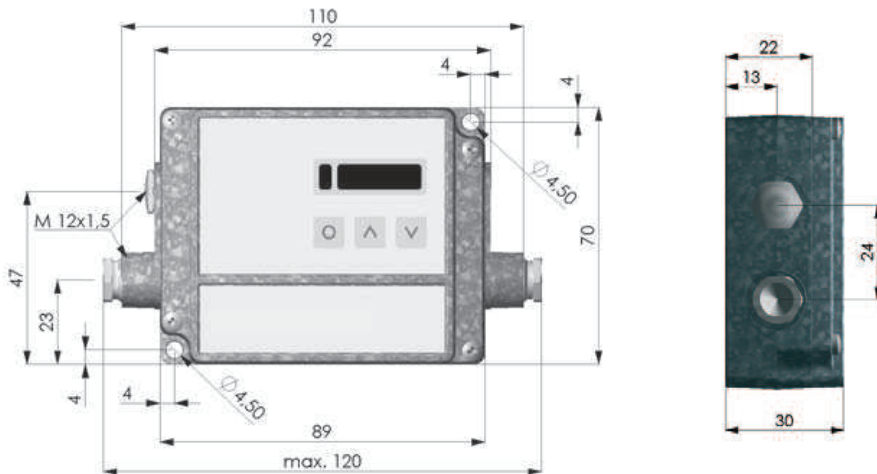
The PSC-SSSi-LT22 is a modular design with exchangeable sensing heads. As one of the industry's smallest infrared sensors, it measures temperatures between -50°C to 1050°C (-58°F to 1922°F) with 22:1 optical resolution.



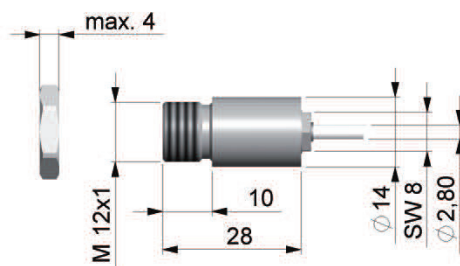
APPLICATIONS

- Paper and packaging
- Ovens
- Dryers
- Building materials
- Plastics
- Wood
- Painted/coated metals
- Food production

Electronics dimensions (in mm)



Sensing head dimensions (in mm)



PSC-SSSi-LT22 FEATURES

- Wide temperature range -50°C to 1050°C (-58°F to 1922°F)
- Sensor head ambient temperature rating to 180°C (356°F)
- Exchangeable sensing head
- Fast response time
- Small sensor head (12 mm)
- Improved repeatability
- USB-C Built in
- No short circuit of outputs possible
- Fully compatible with all mechanical accessories of the PSC-SSS-LT Series



PSC-SSSi-LT22 MEASUREMENT SPECIFICATIONS

Temperature Range (Scalable)	-50°C to 1050°C (-58°F to 1922°F)
Accuracy	± 1% or ± 1°C
Repeatability	± 0.15% or ± 0.1°C
Temperature Coefficient	± 0.05 K/K oder ± 0.05 % / K
Outputs	0-20 mA / 4-20 mA / 0-5 vDC, 0-10 vDC and K thermocouple
Spectral Range	8 - 14 µm
Optical Resolution	22:1 (precision glass optics)
Fixed Focus Optics	Standard and close focus versions
Measurement Principle	1-color
Emissivity / Transmissivity / Reflectivity	0.05 - 1.100
Response Time	115 ms
Exposure Time	115 ms
Sampling Frequency	10 kHz
Thermal Sensitivity (NETD)	35 mK
Warm-up Time	10 min
Detector	Thermopile
Capabilities	Average, Peak hold, Valley hold, Advanced peak / valley hold with threshold and hysteresis, Triggered signal output, Triggered peak/valley hold function (adjustable via software)

GENERAL SPECIFICATIONS

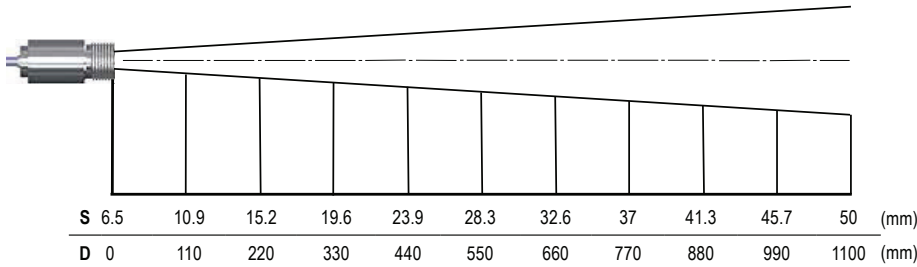
	Sensing Head	Electronic Box
Environmental Rating	IP 65, NEMA 4 (except terminal connector)	
Ambient Temperature	-20°C to 180°C (-4°F to 356°F)	-20°C to 85°C (-4°F to 185°F)
Storage Temperature	-40°C to 180°C (-40°F to 356°F)	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	10-95%, non condensing	
EMC	2014/30/EU	
Shock	IEC 60068-2-27 (25 G and 50 G)	
Vibration	IEC 60068-2-6 (sinus shaped) / IEC 60068-2-64 (broadband noise)	
Standards	CE, UKCA, RoHS	
Power Supply	8-30 V DC	
Power Consumption	1.2 W	
Shock	IEC 68-2-27: 50 G, 11 ms, any axis	
Software	PSC Connect	

ELECTRICAL SPECIFICATIONS

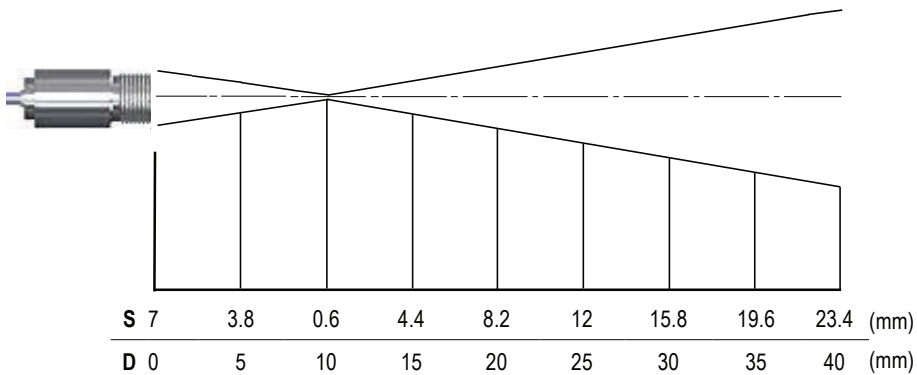
Output/Alarm	24 V/50 mA (open collector)
Output Impedances	Max. 500Ω (with 8 - 36 V DC); V min. 100 kΩ load impedance
Digital Interfaces (optional)	USB, RS232, RS485 (optional), CAN-Bus, Profibus DP, Ethernet IP, Relays
Optional	Relay: 2 x 60 V DC/42 V AC _{eff} ; 0.4 A; optically isolated
Inputs	Programmable functional inputs for external emissivity adjustment, ambient temperature compensation, trigger (reset of hold functions)
Cable Length	1 m (standard), 3 m, 8 m, 15 m
Current Draw	max. 100 mA

OPTICAL SPECIFICATIONS

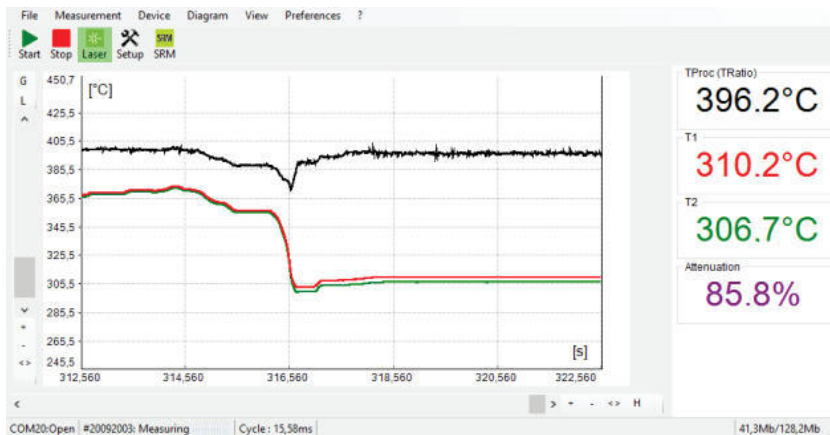
Standard Optics PSC-SSSi-LT SF, D:S = 22:1



Close Focus Optics PSC-SSSi-LT CF, D:S = 22:1 (far field = 1.5:1)



PSC CONNECT SOFTWARE



- Software for easy sensor setup and controlling, supports multi-tasking
- Change sensor heads with just a few clicks
- Graphic display for temperature trends and automatic data logging for analysis and documentation with 5 ms response time
- Adjustment of signal processing functions and programming of outputs and functional inputs of the sensor
- The PSC Connect software allows to customize the sensor to application needs of the user

KPM Analytics | Process Sensors IR

787 Susquehanna Avenue | Franklin Lakes, NJ 07417 USA

Phone: +1 774.399.0461

www.processsensorsir.com | irtemp@processsensors.com

