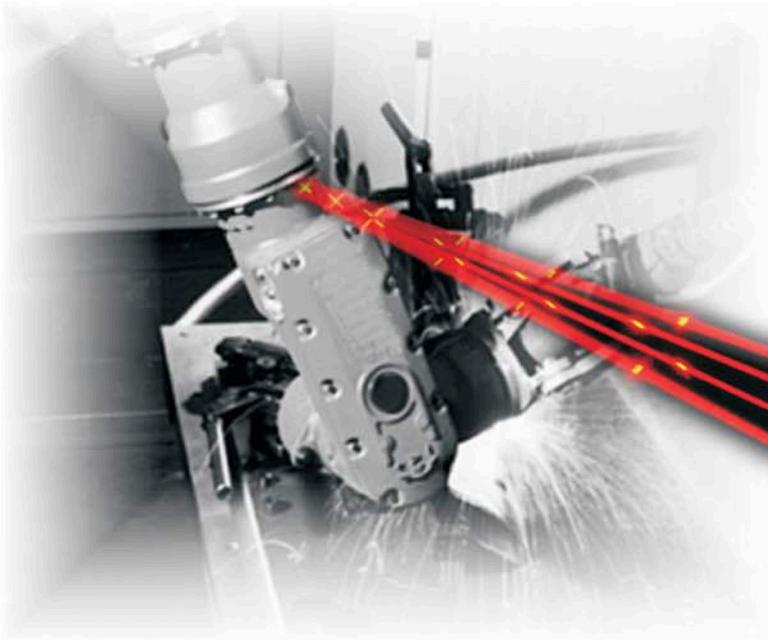# High Accuracy

PROCESS SENSORS
CORPORATION

PSC **P**ortable **L**aser **S**ight **T**hermometer

Infrared thermometer with crosshair laser
sighting - the alternative to thermal imagers

The infrared PSC **PLST** supports the professional noncontact temperature measurement of objects as small as 1 mm in a temperature range between -35°C and +900°C. This thermometer can be used in characteristic applications like preventive maintenance, quality management, research and development and electronic design. The precision of the crosshair laser sighting indicates the spot size at any distance with absolute exactness. The highquality optical performance is a distinguishing feature of the **PLST.**

FEATURES

- The new performance standard of infrared thermometers: detecting spot sizes as small as 1 mm for the measurement of finest details

- crosshair laser sighting marks real spot size at any distance

- temperature range from -35° to +900°C

- optical resolution 75:1

- thermocouple input

- USB interface and graphic software with oscilloscope function for 20 data per second

- flip display switches into most convenient viewing position

PSC **P**ortable **L**aser **S**ight **T**hermometer

Technichal data

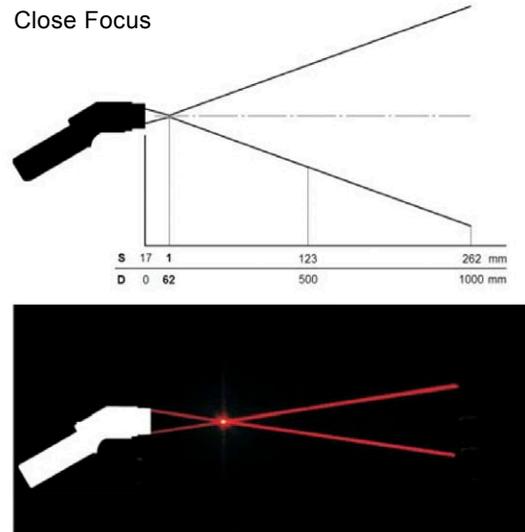|	
Temperature range	-35° to +900°C (-30°F to 1650°F)
Spectral response	8 - 14 μm
Accuracy	±0,75°C or ±0,75% of reading [1]
	(at ambient temperatures 23 ±5°C at 20 - 900°C range)
Temperature coefficient	0,05K/K or ±0,05%/K [1]
	(below 20°C and above 30°C ambient temperature)
Temperature resolution	0,1°C
Repeatability	±0,5°C or ±0,5% of reading [1]
Response time	150 ms (95% signal)
Optics	75:1
	16 mm @ 1200 mm (90% energy)
	switchable to focus:
	1 mm @ 62 mm (90% energy)
Minimum spot size	1 mm
Laser Class II	standard focus: patented crosshair laser
	(crosshair size = IR spot size@any distance)
	close focus: two point laser
	(laser dot size = IR spot size@focus distance)
Emissivity/Gain	0,100 … 1,100; adjustable
Configurations	MAX/MIN/HOLD/DIF/ AVG/°C/°F
Alarm functions	audible and visible HIGH/LOW alarm
Display	LC flip display (horizontal and vertical
	viewing directions controlled by position sensor)
Display LCD backlight	white and alarm colors
Bar graph display	auto scaling
Ambient temperature	0°C - 50°C
Storage temperature	-30°C - 65°C
Relative humidity	10 - 95% (non condensing)
Weight	420 g
EMI	89/336/EWG
Vibration/Shock	IEC 68-2-6: 3 G, 11-200 Hz, any axis
	IEC 68-2-27: 50 G, 11 ms duration, any axis
Temperature range t/c probe input	-35°C to 900°C (-30°F to 1650°F)
Accuracy t/c probe input	±0,75°C or ±1% of reading [1]
Interface, data output	USB
Data memory	100 measurement protocols with time
	stamps, customizable 4 digit location
	and material names
Software	LSconnect oscilloscope software with 20
	readings per second
Power	Battery 2xAA Alkaline or via USB
Battery life time	5 h with laser on and 50% backlight use
	10 h with laser on and w/o backlight
	25 h w/o laser and backlight
Tripod mount	1/4-20 UNC
Standard accessories	USB cable and software
	t/c type K insertion probe
	carrying case, padded pouch, wrist strap,
	batteries
Options	Calibration certificate

[1] whichever is greater

Standard Focus
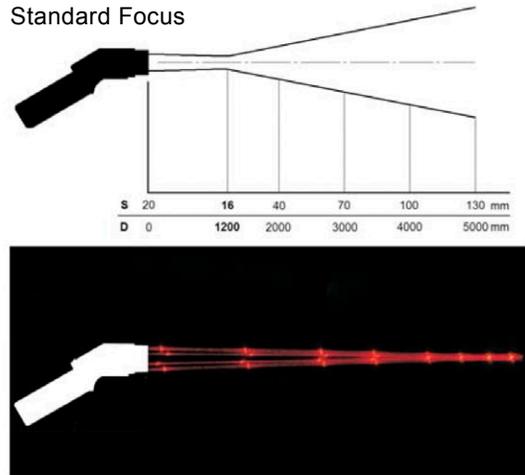
Original schematic photography of the laser beam

Close Focus

Original shematic photography of the laser beam

PLSTConnect Software

PLSTConnect oscilloscope software
with 20 readings per second

Process Sensors Corp.