General specifications

Environmental rating  
IP 65 (NEMA-4)

Ambient temperature  
sensing head: -20 - 85°C  
electronics: 0 - 85°C

Storage temperature  
sensing head: -40 - 85°C  
electronics: -40 - 85°C

Relative humidity  
10 - 95%, non condensing

Vibration (sensor)  
IEC 68-2-6: 3 G, 11 - 200 Hz, any axis

Shock (sensor)  
sensing head 200 g (with massive housing)  
electronics 420 g

Weight  
sensing head 200 g (with massive housing)

Electrical specifications

Outputs/analog  
channel 1: 0/4 - 20 mA, 0 - 5 /10 V, thermocouple J, K  
channel 2: sensing head temperature (-20 - 180°C as 0 - 5 V or 0 - 10 V), alarm output

Alarm output  
Open - collector (24 V /50 mA)

Optional  
relay: 2 x 60 V DC/42 V AC, 0.4 A; optically isolated

Outputs/digital (optional)  
USB, RS232, RS485, CAN, Profibus DP

Output impedances  
mA max. 500 Ω (with 5 - 36 V DC)  
mV min. 100 kΩ load impedance  
thermocouple 20 Ω

Inputs  
programmable functional inputs for external emissivity adjustment, ambient temperature compensation, trigger (reset of hold functions)

Cable length  
3 m (standard), 8 m, 15 m

Current draw  
max. 100 mA

Power supply  
8 - 36 V DC

Measurement specifications

Temperature range (scalable via programming keys or software)  
0 - 710°C / 32 - 1310°F

Spectral range  
7.9 μm

Optical resolution (90% energy)  
10:1

System accuracy²  
(at ambient temperature 23 ±5°C)  
±1% or ±1.5°C¹

Repeatability²  
(at ambient temperature 23 ±5°C)  
±0.5% or ±0.5°C¹

Temperature resolution (NETD)  
0.5°C

Response time  
150 ms

Emissivity/Gain (adjustable via programming keys or software)  
0.100 - 1.100

Transmissivity/Gain (adjustable via programming keys or software)  
0.100 - 1.100

Signal processing (parameter adjustable via programming keys or software, respectively)  
peak hold, valley hold, average; extended hold function with threshold and hysteresis

¹ whichever is greater
² at object temperatures ≥ 25°C
PSC-SSS-P7

Optic, D:S = 10:1

Dimensions

Sensing head

Massive housing

Electronics

PSC Connect Software

- Software for easy sensor setup and remote controlling, supports multi tasking
- Graphic display for temperature trends and automatic data logging for analysis and documentation with 1 ms response time
- Adjustment of signal processing functions and programming of outputs and functional inputs of the sensor
- Automatic emissivity adjustment
- The software PSC Connect allows to customize the sensor to application needs of the user