

# Fast, Very High Temperature Fixed Distance Infrared Sensors

OS1561/OS1571

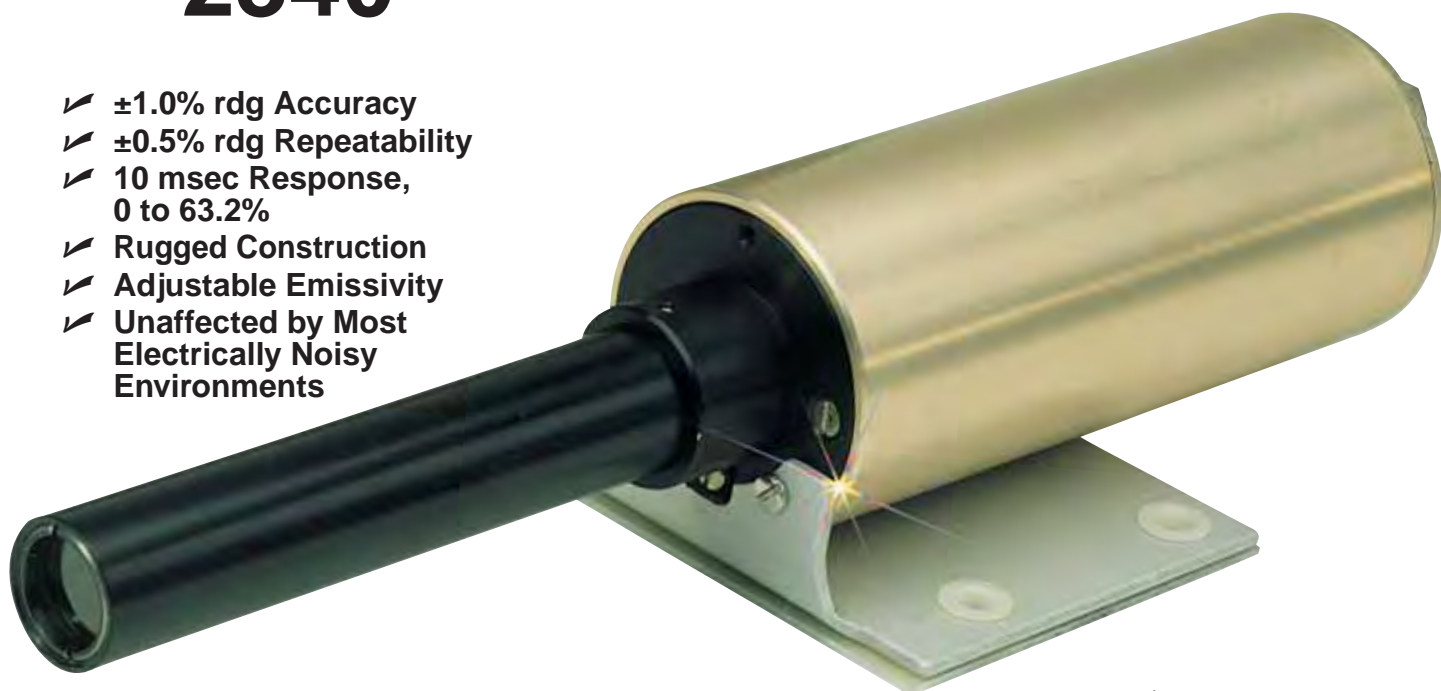
Starts at

**\$2340**



**Ranges  
up to 3700°C  
(6692°F)**

- ✓ ±1.0% rdg Accuracy
- ✓ ±0.5% rdg Repeatability
- ✓ 10 msec Response, 0 to 63.2%
- ✓ Rugged Construction
- ✓ Adjustable Emissivity
- ✓ Unaffected by Most Electrically Noisy Environments



- ✓ Optional Air Purge for Dirty Environments
- ✓ Backlight Capability Available
- ✓ Ranges to 3700°C (6692°F) with Lead Selenide Detector
- ✓ Peak, Sense and Hold Optional
- ✓ Lead Sulfide or Lead Selenide Detector Available
- ✓ Ranges to 390°C (735°F) with Lead Sulfide Detector
- ✓ 1 mV per Degree Output Standard with Optional Thermocouple, 0 to 10 Vdc or 4 to 20 mA Output Available
- ✓ Signal Processing Available with OS1571

OS1561C-R3-V, \$2435, with optional OS1562-MB mounting bracket, \$95, shown smaller than actual size.

The OS1561 and OS1571 stand-alone line of sight infrared pyrometers provide a 10 msec time constant for applications requiring exceptionally fast and accurate non-contact temperature measurements.

It is a compact and rugged unit, with 1 mv/degree outputs, and is compatible with a variety of temperature instrumentation including meters, recorders and dataloggers. It has an optional linear output of either 0 to 10 Vdc or 4 to 20 mA

The detector has a built-in synchronous demodulation circuitry, making it ideal for use in applications with high levels of electrical noise.

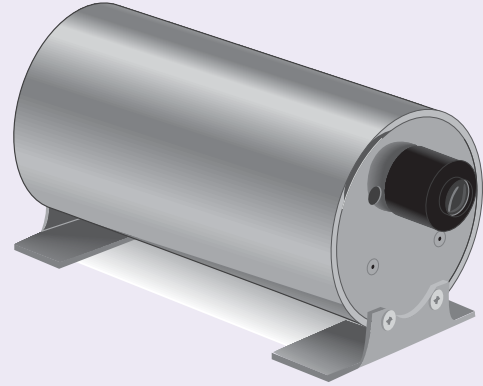
The OS1571 offers signal processing outputs of peak sense and hold. The pyrometer also has the ability for backlighting which defines the exact area being measured by projecting an image of light at a particular point on the object.

The OS1561 and OS1571 detectors are available in various temperature ranges with specific spot sizes at specific target distances (see ordering matrix on next page for details). It is intended for fixed mount applications where the pyrometer location, relative to the object being measured, will be constant.

*OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.*



DP24-T thermocouple input indicator sold separately, \$225. See Section M.



One mV per degree output can be used with process monitors and controllers, including the DP25 and DP41. With optional J or K thermocouple second output, OS1561 models can also be used with thermocouple input meters.

Range Code	Temperature Range	Spectral Response	Detector Type	Spot Size at Distance to Target
R1	130 to 260°C (266 to 500°F)	1.8 to 3.0 microns	Lead sulfide	9.7" @ 120"
R2	185 to 390°C (365 to 734°F)	1.8 to 3.0 microns	Lead sulfide	2.35" @ 120"
R3	70 to 140°C (158 to 284°F)	1.8 to 3.0 microns	Lead sulfide	0.10" @ 2.0"
R4	100 to 300°C (212 to 572°F)	1.8 to 3.0 microns	Lead sulfide	0.17" @ 12.0"
R5	200 to 600°C (392 to 1112°F)	4.5 to 5.15 microns	Lead selenide	9.7" @ 120"
R6	800 to 2400°C (1472 to 4352°F)	4.5 to 5.15 microns	Lead selenide	2.35" @ 120"
R7	1000 to 3000°C (1832 to 5432°F)	4.5 to 5.15 microns	Lead selenide	0.17" @ 12.0"
R8	1235 to 3700°C (2255 to 6692°F)	4.5 to 5.15 microns	Lead selenide	0.49" @ 28.0"

Other temperature ranges and spot sizes vs. distance to target ranges are available; consult factory for details.

### Specifications

#### Ambient Temperature:

10 to 50°C (50 to 122°F)

**Accuracy:** ±1.0% rdg

**Repeatability:** ±0.5% rdg

**Emissivity:** 0.05 to 1.00, adjustable in 0.01 steps

#### Time Constant:

10 msec (0 to 63.2%)

**Output:** 1mV/degree

**Resolution:** 1°C/1°F

**Power:** ±15 Vdc @ 100 mA, regulated

**Power Consumption:** 3 W max

#### Dimensions:

OS1561: 69 H x

102 W x 305 mm D (2.7 x 4.0 x 12")

**Weight:** 3.6 kg (7.9 lb)

### Optional Signal Processing Feature (OS1571 Models Only)

Order Suffix	Add'l Price	Description
-PS	\$330	Peak sense and hold
-SA	330	Signal advertising
-FR	330	Fast rise variable decay

### Optional Second Output (OS1561 Models – No Add'l Cost)

Order Suffix	Description
-V	0 to 10 Vdc
-MA	4 to 20 mA
-J	J thermocouple
-K	K thermocouple

### Optional Second Output (OS1571 Models)

Order Suffix	Add'l Price	Description
-V	\$75	0 to 10 Vdc
-MA	125	4 to 20 mA

**MOST POPULAR MODEL HIGHLIGHTED!**

### To Order (Specify Model Number)

Model No.	Price	Description
OS1561C-(* )	\$2340	Fixed distance infrared pyrometer, 1 mV/°C output
OS1561F-(* )	2340	Fixed distance infrared pyrometer, 1 mV/°F output
OS1571C-(* )	3915	High temperature infrared pyrometer with optional signal processing, 1 mV/°C output
OS1571F-(* )	3915	High temperature infrared pyrometer with optional signal processing, 1 mV/°F output
PSS-D15B	114	±15 Vdc/30 V regulated power supply, ±100 mA, 115 Vac input
Accessories		
OS1562-MB	\$ 95	Mounting bracket
PSS-D15B	114	±15 Vdc or 30 V regulated power supply, ±100 mA, 0.025 line and load, 115 Vac input

\* Specify range code from range chart above.

Come with operator's manual.

Model OS1561 can use range codes R1 thru R4. Model OS1571 can use range codes R1 thru R8.

**Ordering Example: OS1571F-R6-MA**, fixed distance pyrometer with 1112 to 4352°F range, 1 mV/°F output, optional 4 to 20 mA second output and signal averaging, \$3915 + 1000 + 125 = **\$5040**. **OCW-3, OMEGACARE<sup>SM</sup>** extends standard 2-year warranty to a total of 5 years (\$350), \$3915 + 350 = **\$4265**.

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