

Non-Contact Infrared Thermometer

With Relative Humidity and 12:1 Field of View



OS418-LS



OS418-LS shown smaller than actual size.

- ✓ Infrared Range -60 to 500°C (-76 to 932°F)
- ✓ Select Operating Modes and Adjust Parameters Easily
- ✓ Built-in Type K Thermocouple Connection
- ✓ Type K Included for Contact Measurement and to Confirm Emissivity
- ✓ Built-in Relative Humidity Measurement for Environmental Monitoring
- ✓ High or Low Icon Has a Beep Sound with Laser Flashes and Vibration

Applications

- ✓ Building Maintenance
- ✓ Laboratory
- ✓ Automation
- ✓ Industrial
- ✓ Pharmaceutical

OMEGA's OS418-LS is the ultimate tool for temperature measurement. Accurately verify surface temperatures with two of the most reliable temperature sensors:

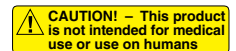
- Non-contact micro-machined thermopile
- Type K thermocouple socket (free T/C included)

Such an arrangement can fulfill most temperature measurement requirements. The non-contact infrared measurement is ideal for non-reachable situations, due to safety or sanitary reasons—instant readings, safely and reliably.

Or use the thermocouple for high precision measurement of contact surfaces, gases and liquids.

The OS418-LS can also help measure emissivity, which is often difficult for a user to determine. Use the Type K thermocouple contact to measure the true temperature. Then, use the non-contact infrared to get the surface temperature. Adjust the emissivity until they are the same, with the option to use the same emissivity setting for that object next time. No more guess work, no more looking up on Emissivity Table.

This unit also comes with an ultra-long battery life (2 AAA batteries are included).





To Order	
Model No.	Description
OS418-LS	Non-contact infrared thermometer with relative humidity, 12:1, Type K

Comes complete with CD, 1 Type K thermocouple, 2 "AAA" batteries and operator's manual.

Ordering Example: OS418-LS, non-contact infrared thermometer with relative humidity, 12:1, Type K

Specifications

Item	Non-Contact Infrared Scan Function	Thermocouple Scan Function (Type K, bead wire included)
Measurement Range	-60 to 500°C (-76 to 932°F)	-64 to 1400°C (-83.2 to 2552°F)
Operating Range	0 to 50°C (32 to 122°F)	
Accuracy (Tobj = 15-35°C, Tamb = 25°C)	±1.0°C (1.8°F)	±1% of reading or 1°C (1.8°F) whichever is greater (Test under Accuracy Tamb = 23±6°C)
Accuracy Tamb=23±6°C (Tobj = -33-500°C, Tamb=23±3°C)	T obj = 0 to 500°C: ±2% of reading or 2°C (4°F) whichever is greater; T obj = -60 to 0°C: ±(2°C+0.05/degree)°C	
Emissivity Range	0.95 default – adjustable 0.1 to 1 step .01	
Resolution (-9.9 to 199.9°C/°F)	0.1°C/0.1°F, otherwise 1°C/1°F	
Response Time (90%)	1 second	
Distance: Spot	12:1 (90% energy covered)	
Relative Humidity (Tamb=23 ±5°C)	1 to 99%, accuracy: ±3% from 20 to 80%, otherwise ±5%	
Dew Point	-50 to 50°C, accuracy: ±2.5°C from 20 to 30% RH; ±2°C from 31 to 40% RH; ±1.5°C from 41 to 95% RH	
Dry and Wet Bulb Temperature Range	-20 to 65°C (-4 to 149°F), accuracy: ±2.5°C	
Battery Life	Between 140 and 180 hours continuous use (Alkaline, without laser and backlight)	
Dimensions	46.0 x 143.0 x 184.8 mm (1.81 x 5.63 x 7.28 inch)	
Weight	240 grams (8.5 oz) including batteries (2 "AAA" batteries included)	

Note: Under the electromagnetic field of 3V/m from 200 to 600 MHz, the maximum error is 10°C (18°F).