



# *Non Contact* **Thermohunters**



Built-in **Infrared** temperature measurement  
**Flexible** COAXIAL LASER MARKER **Accurate** Easy Installation

Every object emits infrared energy from its surface. Optex Non-contact Infrared Thermometers instantly detect and convert the amount of infrared energy into a temperature value. Contact between the thermometer and the object is not necessary, therefore it enables a hygienic, quick and easy measurement of the target, from a safe distance. Optex Built-In thermometers are developed to secure a reliable measurement under the most extreme (industrial) circumstances. Even in these extreme situations the Optex Thermohunters are reliable, yet simple and easy to use for various applications.

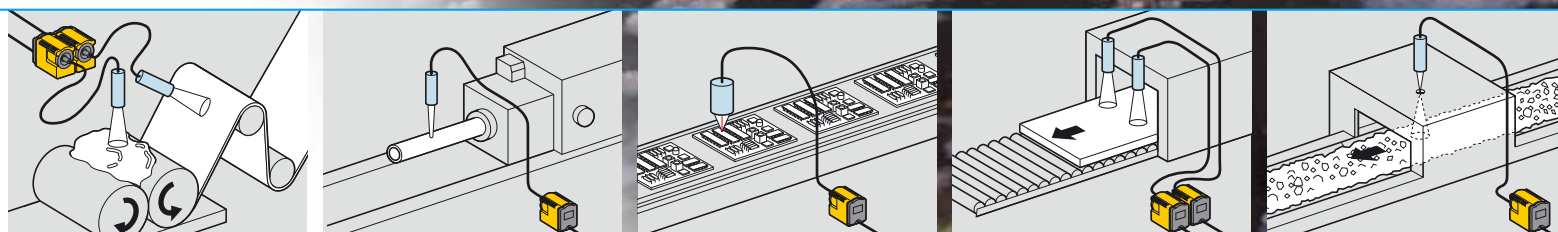
BA-series



BF-series



BA-series



infrared temperature measurement - waterproof - multifunctional - hygienic

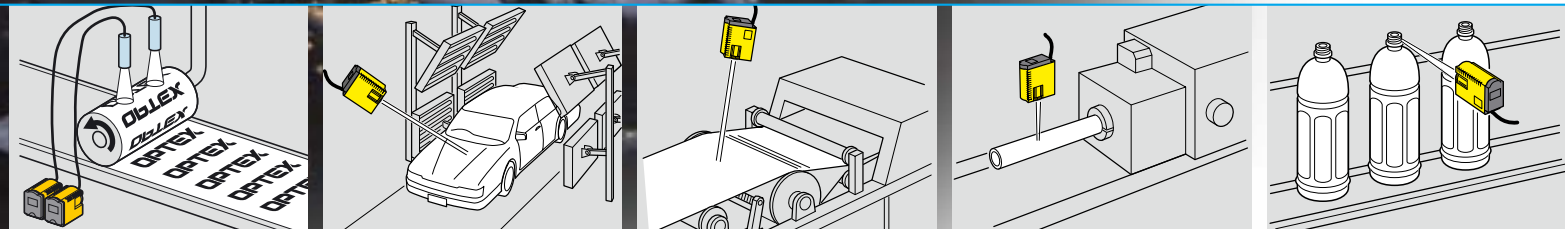
### BA series

The Optex BA-series measures quickly and accurately while keeping a safe distance. Spot measuring happens within a temperature range of 0-500°C at  $\pm 1\%$  level of precision. With the  $\epsilon$ -Teach function, the Optex BA-series are able to calculate and memorise the emissivity ratio ( $\epsilon$ ) automatically. The coaxial laser marker allows you to focus quickly and easily on the object. An air purge collar is optional available to adapt the Thermohunter into dusty or moist environments. The Optex Thermohunter BA-series are available in different specifications, such as output or measuring distance to the target.

### BF series

The Optex BF-series are especially developed for precise measurement in harsh environmental conditions. A two-meter long optical fibre gives access to areas under influence of noise. The optical fibre and the sensor head are resistant to an operating temperature of 600°C. The Optex BF-series measures quickly and accurately while keeping a safe distance. Spot measuring happens within a temperature range of 400-1200°C at  $\pm 1\%$  level of precision. With the  $\epsilon$ -Teach function the, Optex BF-series are able to calculate and memorise the emissivity ratio ( $\epsilon$ ) automatically. An air purge collar is optional available to adapt the Thermohunter into dusty or moist environments. The Optex Thermohunter BF-series are available in different specifications, such as output or measuring distance to the target and measurement range.





cal - quick response time - coaxial laser marker -  $\epsilon$  teach - non contact - safe

### BS series

The Optex BS-series are non-contact thermometers with a separate sensor head. This modular thermometer can be adapted to every specific situation or customer requirement. Various sensor-heads, amplifiers, cables or mounting brackets make this possible. The Optex BS-series measures quickly and accurately while keeping a safe distance. Spot measuring happens within a temperature range of 0-500°C at  $\pm 1\%$  level of precision. With the  $\epsilon$ -Teach function, the Optex BS-series are able to calculate and memorise the emissivity ratio ( $\epsilon$ ) automatically. An air purge collar or water-cooling is optional available to improve the sensors ability to operate in various environmental circumstances. The Optex Thermohunter BS-series are available in different specifications, such as output contact and measurement distance to the target and temperature range.

## BA-series

## BF-series

Specifications

Model	BA-06TV	BA-06TC	BA-06TA	BA-30TV	BA-30TC	BA-30TA	BF-30G0-A	BF-30G0-V	BF-30G1-A	BF-30G1-V
Measuring Range	0 - 500°C						400 - 800°C		600 - 1200°C	
Detection distance	Ø6/200 mm			Ø30/1000 mm			Ø30/1000mm (with standard lens, BFL-30)			
Optics	Silicon Lens						Infrared fiber optics			
Sensing Element/Wavelength	Thermopile/8-14 µm						Ge 1 - 1.6 µm			
Response Time	500ms/90%						200msec. 90%			
Measuring Accuracy	± 1% of reading value or ±2°C, whichever is larger (ε≒ 1.0)						±2% of reading value			
Repeatability	±1% of reading value						±0.5% of reading value			
Display Resolution	1°C						1°C			
Output	1mV/°C	350mA DC 100V MaxPhoto Mos relay	4-20mA	1mV/°C	350mA DC 100V MaxPhoto Mos relay	4-20mA	20mA	1mV/°C	4-20mA	1mV/°C
Output Resolution	0.2°C						0.2°C			
Output renewal interval	50msec									
Emissivity ratio (ε) Adjustment	0.10-1.20 (0.01/1 step)						0.10 - 1.20 (0.01/1 step)			
Delay	1 (0.5sec) - 200 (Approx 10sec)						Normal 1 (0.2 sec.) - 100 (10sec.) variable			
Power Supply	12-24 DC ± 10% MAX 150mA						12-24V DC. 10% MAX 150mA			
Operating Temperature	0 - 50°C						0 - 150°C (Fiber unit) 0 - 50°C (Amplifier unit)			
Humidity	35-85%RH (without dew condensation)						35 - 85%RH (without dew condensation)			
Storage Temperature	-10 - 60°C						-10 - 60°C			
Vibration Resistance	3G (20-50Hz, in accordance with JIS C0911)						3G (20-50Hz according to JIS C0911)			
Water Resistance	IP65						IP65			
Materials	Ring case: glass-containing PBT, Rear cover: PC						Amplifier Unit: Ring case: glass-containing PBT; Rear cover: PC Fiber Unit: SUS; Lens attachment: BS/Ni-M			
Weight	350g	360g	350g	350g	360g	350g	500g			
Standard accessories	1 Mounting plate, 2 M4 screws						1 Mounting plate, 2 M4 screws, 2 nuts for lens (M16)			
Optional accessories	Air Purge Collar						Lens (BFL-01, BFL-02), Air purge collar (BF-AP2)			

Design and specifications are subject to change for product improvement without prior notice.

Products mentioned in this catalog are equipped with a fiber optic cable. Since some countries do not allow the export of such products or require documentation in case of re-export to designated countries, please confirm the relevant regulations.

## BS-series Sensor head

Specifications

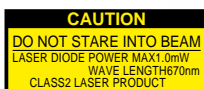
Model	BS-30T	BS-05T	BS-02T
Detection distance	Ø30/500mm	Ø5/100mm	Ø2/50mm
Optics	Silicon lens		
Sensing element/Wavelength	Thermopile/8 to 14µm		
Sighting method	N/A		Coaxial laser marker (Class 2)
Operating temperature	0 - 65°C (0 - 150°C: with optional cooling jacket)		0 - 50°C
Humidity	35 - 85%RH (without dew condensation)		
Storage temperature	-20 - 70°C		-20 - 60°C
Vibration resistance	3G (20 - 50Hz, in accordance with JIS C0911)		
Water resistance	IP67		
Weight	300g		400g

A sensor and an amplifier form one complete set. They do not function individually. Specifications may change without prior notice.

## BS-series Amplifier

Specifications

Model	BS-V	BS-A
Measuring range	0 - 500°C	
Response time	500msec./90%	
Measuring Accuracy ( $\epsilon \approx 1.0$ )	±1% of reading value or ±2°C whichever is greater	
Repeatability	±1°C of reading value	
Display resolution	1°C	
Analog output	1mV/°C	4 - 20mA
Output resolution	0.2°C	
Emissivity ratio ( $\epsilon$ ) adjustment	0.10 - 1.20 (0.01/1 step)	
Delay	1 (0.5sec) - 200 (approx. 10sec) variable	
Power supply	12 - 24V DC ±10%/Max 100mA	
Operating temperature	0 - 50°C	
Humidity	35 - 85%RH (without dew condensation)	
Storage temperature	-20 - 60°C	
Vibration resistance	3G (20 - 50Hz, in accordance with JIS C0911)	
Water resistance	IP65	
Weight	320g	
Standard accessories	1 Mounting plate, 2 M4 screws	



**Secumatic**  
— — — VISION IN MOTION

Tiber 2  
2491 DH The Hague  
P.O. Box 24009  
2490 AA The Hague  
The Netherlands  
TEL.: +31 (0)70 419 41 00  
FAX: +31 (0)70 317 73 21  
E-MAIL: info@secumatic.nl  
WEBSITE: www.secumatic.nl

