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<b>Архангельск</b> (8182)63-90-72	<b>Кемерово</b> (3842)65-04-62	<b>Оренбург</b> (3532)37-68-04	<b>Тверь</b> (4822)63-31-35
<b>Астрахань</b> (8512)99-46-04	<b>Киров</b> (8332)68-02-04	<b>Пенза</b> (8412)22-31-16	<b>Тольятти</b> (8482)63-91-07
<b>Барнаул</b> (3852)73-04-60	<b>Коломна</b> (4966)23-41-49	<b>Петрозаводск</b> (8142)55-98-37	<b>Томск</b> (3822)98-41-53
<b>Белгород</b> (4722)40-23-64	<b>Кострома</b> (4942)77-07-48	<b>Псков</b> (8112)59-10-37	<b>Тула</b> (4872)33-79-87
<b>Благовещенск</b> (4162)22-76-07	<b>Краснодар</b> (861)203-40-90	<b>Пермь</b> (342)205-81-47	<b>Тумень</b> (3452)66-21-18
<b>Брянск</b> (4832)59-03-52	<b>Красноярск</b> (391)204-63-61	<b>Ростов-на-Дону</b> (863)308-18-15	<b>Ульяновск</b> (8422)24-23-59
<b>Владивосток</b> (423)249-28-31	<b>Курск</b> (4712)77-13-04	<b>Рязань</b> (4912)46-61-64	<b>Улан-Удэ</b> (3012)59-97-51
<b>Владикавказ</b> (8672)28-90-48	<b>Курган</b> (3522)50-90-47	<b>Самара</b> (846)206-03-16	<b>Уфа</b> (347)229-48-12
<b>Владимир</b> (4922)49-43-18	<b>Липецк</b> (4742)52-20-81	<b>Саранск</b> (8342)22-96-24	<b>Хабаровск</b> (4212)92-98-04
<b>Волгоград</b> (844)278-03-48	<b>Магнитогорск</b> (3519)55-03-13	<b>Санкт-Петербург</b> (812)309-46-40	<b>Челябинск</b> (8352)28-53-07
<b>Вологда</b> (8172)26-41-59	<b>Москва</b> (495)268-04-70	<b>Саратов</b> (845)249-38-78	<b>Челябинск</b> (351)202-03-61
<b>Воронеж</b> (473)204-51-73	<b>Мурманск</b> (8152)59-64-93	<b>Святиополь</b> (8692)22-31-93	<b>Череповец</b> (8202)49-02-64
<b>Екатеринбург</b> (343)384-55-89	<b>Набережные Челны</b> (8552)20-53-41	<b>Симферополь</b> (3652)67-13-56	<b>Чита</b> (3022)38-34-83
<b>Иваново</b> (4932)77-34-06	<b>Нижний Новгород</b> (831)429-08-12	<b>Смоленск</b> (4812)29-41-54	<b>Якутск</b> (4112)23-90-97
<b>Ижевск</b> (3412)26-03-58	<b>Новокузнецк</b> (3843)20-46-81	<b>Сочи</b> (862)225-72-31	<b>Ярославль</b> (4852)69-52-93
<b>Иркутск</b> (395)279-98-46	<b>Ноябрьск</b> (3496)41-32-12	<b>Ставрополь</b> (8652)20-65-13	
<b>Казань</b> (843)206-01-48	<b>Новосибирск</b> (383)227-86-73	<b>Сургут</b> (3462)77-98-35	
	<b>Киргизия</b> (996)312-96-26-47	<b>Россия</b> (495)268-04-70	<b>Казахстан</b> (772)734-952-31

**Very small infrared thermometer for -50 °C to 1030 °C**

**Features:**

- Size: M12x1, 28 mm long, stainless steel housing
- Temperature range: -50 °C to 1030 °C
- Rugged coated silicon optics
- Usable up to 180 °C ambient temperature without cooling (LTH sensing head)
- Green LED alarm indication, aiming support, self diagnostic or temp. code indication
- Scalable analog output: 0 – 5/10 V or 4 – 20 mA (two-wire); additional simultaneous alarm output
- Easy programming via smartphone app (IR mobile) or Windows software (Compact Connect)



**Measurement specifications**

Temperature range (scalable via software)	-50 ... 1030 °C
Spectral range	8 – 14 μm
Optical resolution (90 % energy)	22:1 (LT22H) 15:1 (LT15 / LT15H) 2:1 (LT02)
CF lens (optional)	2.3 mm @ 50 mm (22:1) 3.4 mm @ 50 mm (15:1) 2.5 mm @ 23 mm (2:1 with CF optics)
System accuracy	±1.0 % or ±1.0 °C <sup>3), 4)</sup>
Repeatability	±0.5 % or ±0.5 °C <sup>3), 4)</sup>
Temperature coefficient	±0.05 K/K or ±0.05 %/K <sup>5)</sup>
NETD	50 mK <sup>6)</sup>
Response time (90 %)	14 ms (LT) / 150 ms (LTH)
Emissivity / Gain (adjustable via 0 – 5 V DC input or software)	0.100 – 1.100
Transmissivity (adjustable via software)	0.100 – 1.100
Signal processing (parameter adjustable via software)	Peak hold, valley hold, average; extended hold function with threshold and hysteresis
Dimensions of electronics	Length: 35 mm Diameter: 12 mm
Software	optris® Compact Connect (Windows) IR mobile (Android)

**General specifications**

Environmental rating	IP 65 (NEMA-4)
Ambient temperature	-20 ... 120 °C (LT sensing head) -20 ... 180 °C (LTH sensing head) -20 ... 80 °C (electronics) -20 ... 75 °C (electronics / mA version) <sup>1)</sup>
Storage temperature	-40 ... 85 °C (sensing head and electronics)
Relative humidity	10 – 95 %, non condensing
Vibration	IEC 60068-2-6 / -64
Shock	IEC 60068-2-27 (25 G and 50 G)
Weight	42 g

**Electrical specifications**

Output / analog	0 – 5 or 10 V or 4 – 20 mA
Output / alarm	0 – 30 V / 50 mA (open collector) (mA version: 500 mA)
Output / digital	Uni-/ bidirectional, 9.6 kBaud, 0/3 V digital level, USB optional
LED functions	Alarm indication, automatic aiming support, self diagnostic, temperature indication (via temp.code)
Input (0 – 10 V)	Programmable functional input for external emissivity setting <sup>2)</sup> / ambient temperature adjustment <sup>2)</sup> , triggered signal output or peak-hold function
Cable length head – electronics: after electronics:	0.5 m (standard), 3 m, 6 m 0.5 m (standard), 3 m, 6 m
Power supply	5 – 30 V DC
Current draw	9 mA (mV version)

<sup>1)</sup> mA version: For Vcc (supply voltage) 5 – 12 V DC/ the electronic's max. ambient temperature is 65 °C at Vcc >12 V DC

<sup>2)</sup> mV version only

<sup>3)</sup> Object temperature >23 °C; whichever is greater

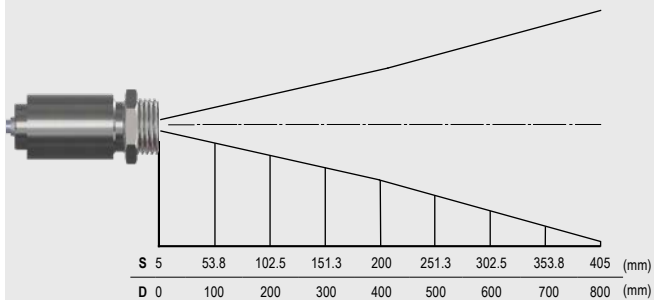
<sup>4)</sup> At ambient temperature 23 ±5 °C

<sup>5)</sup> At ambient temperatures <18 °C and >28 °C; whichever is greater

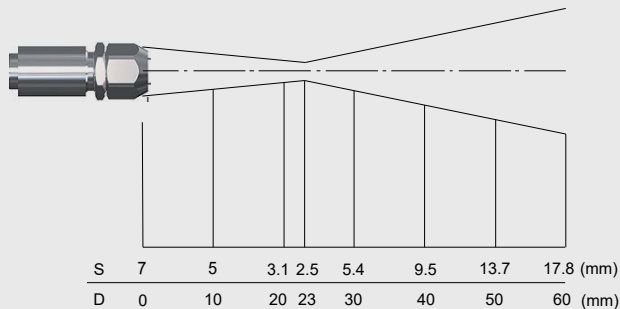
<sup>6)</sup> At time constant of 200 ms and T<sub>Obj</sub> 200 °C

## Optical parameters

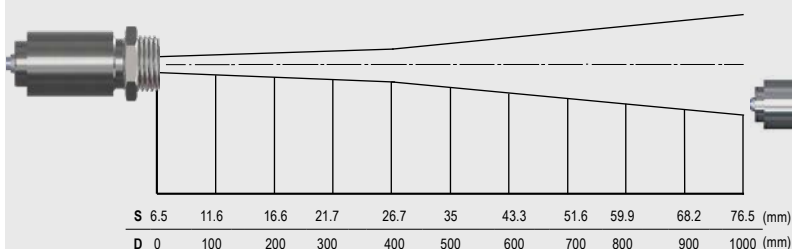
SF optics, D:S = 2:1



CF optics D:S = 2:1 (far field = 2,5:1)

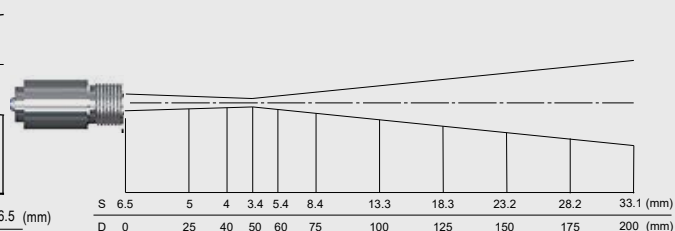


SF optics, D:S = 15:1

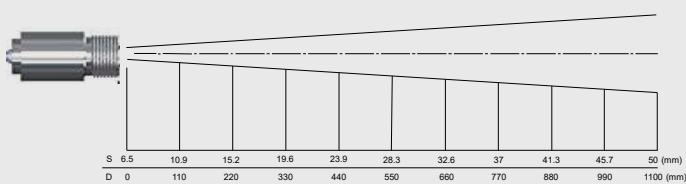


Options with integrated CF lens

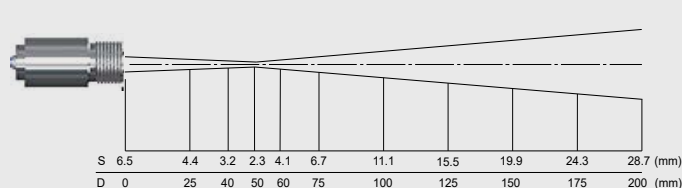
CF optics D:S = 15:1 (far field = 5:1)



SF optics D:S = 22:1

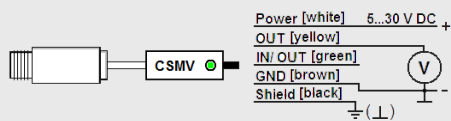


CF optics, D:S = 22:1 (far field = 6:1)

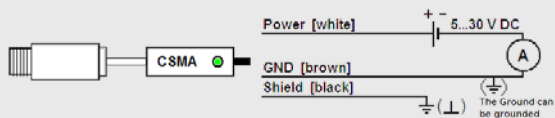


## Connections

Connection mV version



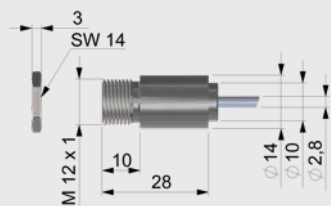
Connection mA version



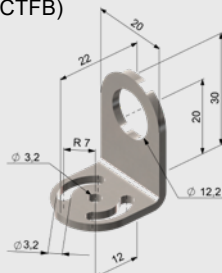
The CSmicro can be connected to a smartphone via the IR app connector

## Dimensions

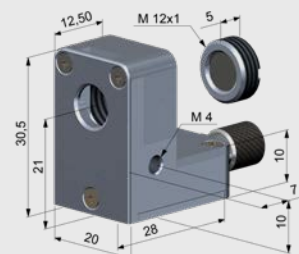
Dimensions CSmicro



Mounting bracket, fixed (ACCTFB)



Air purge with integrated CF optics (ACCTAPLCF)



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