

### KT15.69 IIP

#### Infrared Radiation Thermometer

- RS485 interface option
- Application: Fire-, SNCR-, minimum temperature-control
- Measurement of flue gas temperature (medium/large boilers)
- Wide range of accessories for protection in combustion processes



Measurement specifications	
Temperature range <sup>1</sup> :	0 ... 1700 °C
Spectral response:	CO <sub>2</sub>
Measurement uncertainty:	± 0.5 °C plus 0.7 % of the temperature difference between measured target and instrument
Temperature resolution (NETD):	Typical value is 0.10 °C (2 Sigma, by t <sub>90</sub> : 3 s, 400 °C; ε = 1) Depending on the measured temperature and the response time
Long-term stability:	Better than 0.01 % of the absolute measured temperature in Kelvin per month
Field of view:	From Ø 0.7 mm (± 5 %) on, depending on optic and detector
Response time (t <sub>90</sub> ):	Selectable from 30 ms to 600 s, option: 5 ms, 10 ms
Temperature unit:	°C, K or °F
Emissivity:	0.100 ... 1.000 in 0.001 steps
Lens:	CaF <sub>2</sub>
Electrical specifications / Functions	
Analog output: Function:	0 ... 1 V; 0 ... 10 V; 0 ... 20 mA; 4 ... 20 mA; resolution: 16 bit Actual, maximum or minimum value (scalable (minimum span 50 K))
Analog input option: Function:	0 ... 10 V Compensation of ambient temperature influence, transmittance, reflection and emissivity
Service keyboard at the side with LED display:	Operation of the instrument without computer software
Digital output option: Function:	2x open-collector-output Threshold detection Min, Max temperature value, alarm status
Digital input option: Function:	Dry contact switch or operating voltage or open-collector Reset of memory function, (de-)activate digital outputs or laser
Thermal switch option: Function:	Switching temperature > 70 °C, maximum load ≤ 48 V, ≤ 0.5 A Internal temperature alarm
Serial interface:	RS232 interface, bi-directional 9.6 ... 115.2 kBaud, optional: RS485
Laser aiming options:	Integrated pilot laser or focus laser
Programmable via serial interface and service keyboard:	Emissivity, analog output, analog output function, response time, temperature unit, Min and Max value memory adjustable with decay rate, reset by contact or temperature threshold, alarm switching point, time period etc.
Operating voltage:	DC: 10.5 ... 30 V AC: 24 V ± 10 %, 48 ... 400 Hz
Power consumption:	< 150 mA at 24 VDC 3.5 W

<sup>1</sup> Depending on configuration

## Technical Data Sheet

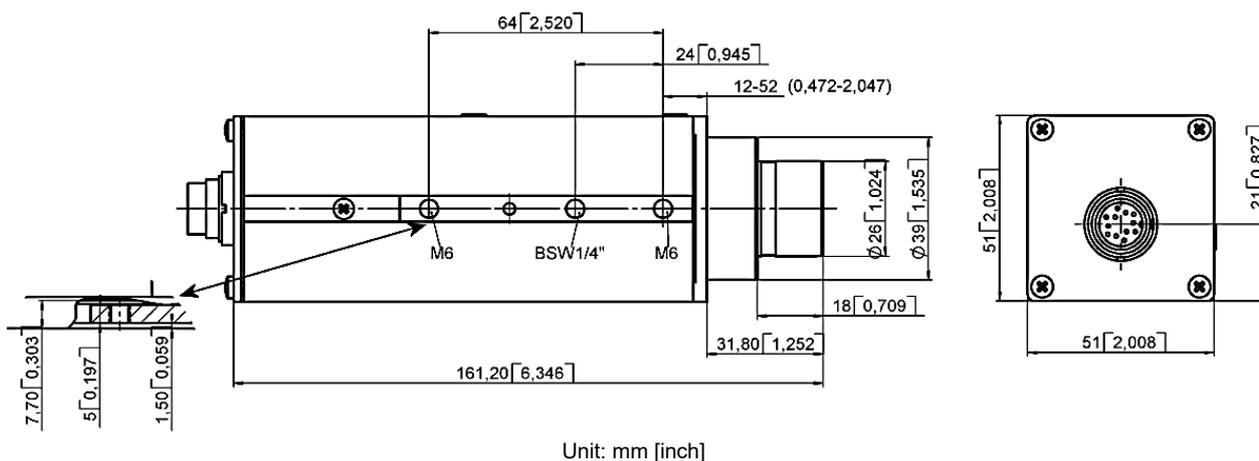
### General specifications

<b>Storage temperature:</b>	-20 ... 70 °C
<b>Permissible ambient temperature:</b>	-20 ... 60 °C (optional with protective cooling jacket WK15 up to 250 °C)
<b>Protection class:</b>	IP65 (IEC), (NEMA6)
<b>Protection against oscillation:</b>	DIN 40046 BL.8, test: FC, vibration resistance: A B1 E, Frequency range: 10 ... 55 Hz, amplitude: ± 0.2 mm, duration of test: 30 min
<b>Housing:</b>	Stainless steel and aluminum
<b>Weight:</b>	Appr. 0.55 kg

### Scope of supply and options<sup>2</sup>

<b>Accessories:</b>	<ul style="list-style-type: none"> <li>■<sup>3</sup> Manual KT15 II</li> <li>■ Software EasyMeas</li> <li>■ Connecting cable with 12-pin female connector 2 m length, PVC, unterminated ends</li> <li>□ Connecting cable ≥ 5 m length: PTFE; PUR; PVC; TPE, unterminated ends or 12-pin female connector</li> </ul>
<b>Calibration certificate:</b>	□ HEITRONICS certificate
<b>Housing:</b>	<ul style="list-style-type: none"> <li>□ Protective cooling jacket WK15 up to 250 °C ambient temperature</li> <li>□ Ex-proof housing stainless steel (II 2 G, Ex d e IIC T5 Gb Tamb: -50 °C ... 60 °C; IP66)</li> <li>□ Weatherproof housing</li> </ul>
<b>Adapter and flanges:</b>	□ See document Options and Accessories
<b>Bus interface:</b>	□ With transducer

### Dimensions<sup>4</sup>



<sup>2</sup> Special model specification on request

<sup>3</sup> ■ Standard function

□ Option

<sup>4</sup> The dimensions given within this document will be valid for the drawing shown.