



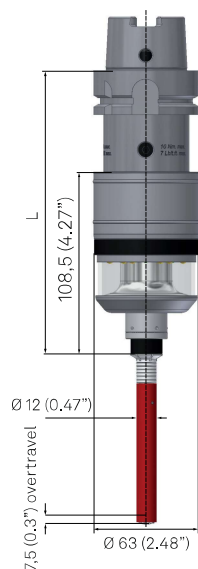
# Infrared temperature probing system IRP25.50-TP

## Patented part temperature measurement

Measures the workpiece temperature fully automatically both before as well as during the machining process (patented). This allows the control of production processes and the adaptation of machining parameters during production. Temperature-dependent parameters can be reliably determined before the workpiece goes to the next machining step with tolerance specifications. This way, consistently high production quality is ensured.

The bidirectional probe IRP25.50 is characterized by its modular structure. Various measuring units, different extensions and cross-probes can be used. This makes it possible to optimally adjust the probe to future requirements and applications in the machine tool at any time.

- Measures the workpiece temperature fully automatically before and during the machining process
- Unique and patented technology – only at Hexagon



Technical data	
Power Supply	1 x 9 V battery block, 6LR61 Lithium: 1200 mAh, Alkaline: 550 mAh
Material	Stainless steel, POM
Weight without Shank	Approx. 920 g
Temperature Range	Storage: 5 °C – 70 °C, Operation: 10 °C – 50 °C
Sealing	IP68: EN60529
Battery lifetime in continuous operation (Probing every 2 seconds)	Up to 750 hours
Sensing Directions	-Z
Maximum Stylus Overtravel	-6,9 mm
Trigger Force	13N
Recommended Probing Feedrate	500 mm/min
Temperature accuracy	Analog / digital: $\pm 0,1^\circ\text{C}$ Analog / analog: $\pm 0,1^\circ\text{C}$
Transmission	HDR <sup>+</sup>



## Temperature measurement in the machine tool

The temperature probe captures the workpiece temperature within seconds. Secure HDR+ infrared-transmission enables the adjustment of production parameters or the control of the process. This way, consistent production quality and process reliability is ensured.

### Your advantage:

- Measurement of workpiece temperature
- Machining of the workpiece only when temperature is correct
- Precise production results, even with temperature influence
- Adjust production parameters
- Calculate measurement results back to desired temperature



Determination of the workpiece temperature: Before, during and after machining.

## Infrared receivers

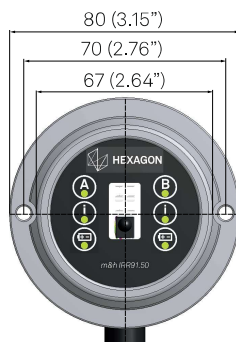
Hexagon infrared receivers reliably process measurement and temperature data. All receivers are extremely robust and waterproof and can communicate with m&h infrared probes and infrared tool setters.



Temperature sensors available in various lengths.

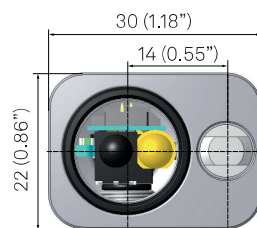
### IRR91.50

- Dual Probe and bidirectional HDR and HDR+ technology
- Available with radial and axial cable outlets



### IRR91.42

- Bidirectional HDR+ technology within compact housing
- Can be directly mounted in the headstock of the machine.



Hexagon Infrared-receiver always ensure reliable transmission

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that utilise data from design and engineering, production and metrology to make manufacturing smarter. For more information, visit [hexagonmi.com](https://hexagonmi.com).

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