



Spotfinder-Infrarotkamera Xi 1M

Temperature Measurement in the Metal Industry

The new Xi 1M spotfinder infrared camera from Optris has a wide continuous temperature measurement range up to 1800 °C and is perfect for applications in the metal industry.

Spotfinder infrared cameras combine the advantages of infrared cameras and infrared thermometers. They measure the temperatures for each pixel – in the new Xi 1M from Optris the highly dynamic CMOS sensor has a resolution of 396 x 300 pixels – and identify the maximum temperature within the image at 20 Hz. The new Spotfinder infrared camera is housed in a compact, robust housing and can therefore be easily integrated into various applications.

With a manual motor focus, the image can be quickly focused via the included software.

Continuous measuring range up to 1800 °C

With a spectral range of 0.85 to 1.1 μm , the Xi 1M is perfectly designed for temperature measurement on metal surfaces, melts, graphite or ceramics. The continuous temperature measurement range of 450 °C to 1800 °C, which is relevant for many applications in metal processing, also fits in with this. Compared to many other solutions, the new Spotfinder infrared camera does not require a measurement range switch. The integrated spot finder function automatically measures the highest temperature within the camera's field of view. This is particularly advantageous in metallurgy, e.g. when the liquid metal is partially covered by slag in melts. Via an external process interface, up to 9 freely definable measuring fields can be further processed as analog outputs (optionally 0/4-20 mA or 0-10 V) or output as alarms via relays, which is ideal for use in the OEM sector.

The Xi 1M can be configured for autonomous operation (without a PC). The temperature values are then output via a direct analogue output. Fast Ethernet, USB 2.0 and RS485 are available as digital interfaces. Modern Industrial Ethernet interfaces such as Modbus TCP or EtherNet/IP are also available as an option for the Xi 1M. The Xi 1M is available with various optics, which allow opening angles between 7° and 28° and operates at ambient temperatures from 5 °C to 50 °C. Optionally available accessories, such as a free-blowing attachment, shutter or water-cooled housing, help to ensure that the new Spotfinder infrared camera can also be used under more difficult environmental conditions.