

## What is a smart camera?

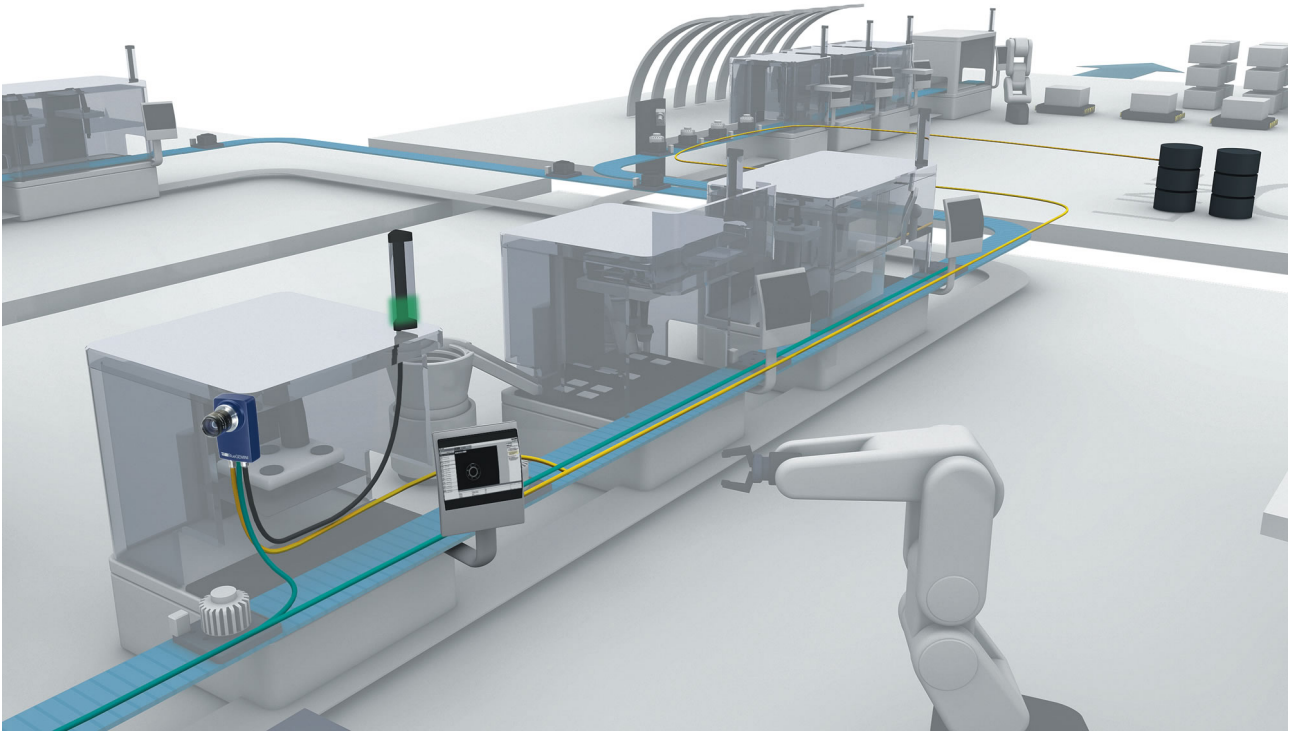
Smart cameras combines a PC, a frame grabber, an I/O extension board, and a camera in one housing. There are several advantages:

A smart camera is an optimized system with **high performance** and **low power consumption**. For this reason cooling plays a tangential role compared to classic camera/frame grabber/PC solutions. Because of the **compact size**, smart cameras are suitable for automation tasks as soon as PC systems are oversized. Code reading, position monitoring and position output, for example, are standard tasks of smart cameras.

The **availability** of **smart cameras** is another plus. Product life cycles of more than 10 years are not uncommon and depend on the availability of single components.

## With the smart camera prepared for Industry 4.0

With **Industry 4.0** and the associated digitization of production facilities has ushered a new era. The essential core of digital production is that all manufacturing steps are observed by cameras. Ideally the cameras does not only acquire images, which are evaluated by an operator, but the cameras should recognize autonomously, if a manufacturing step was successful or not.



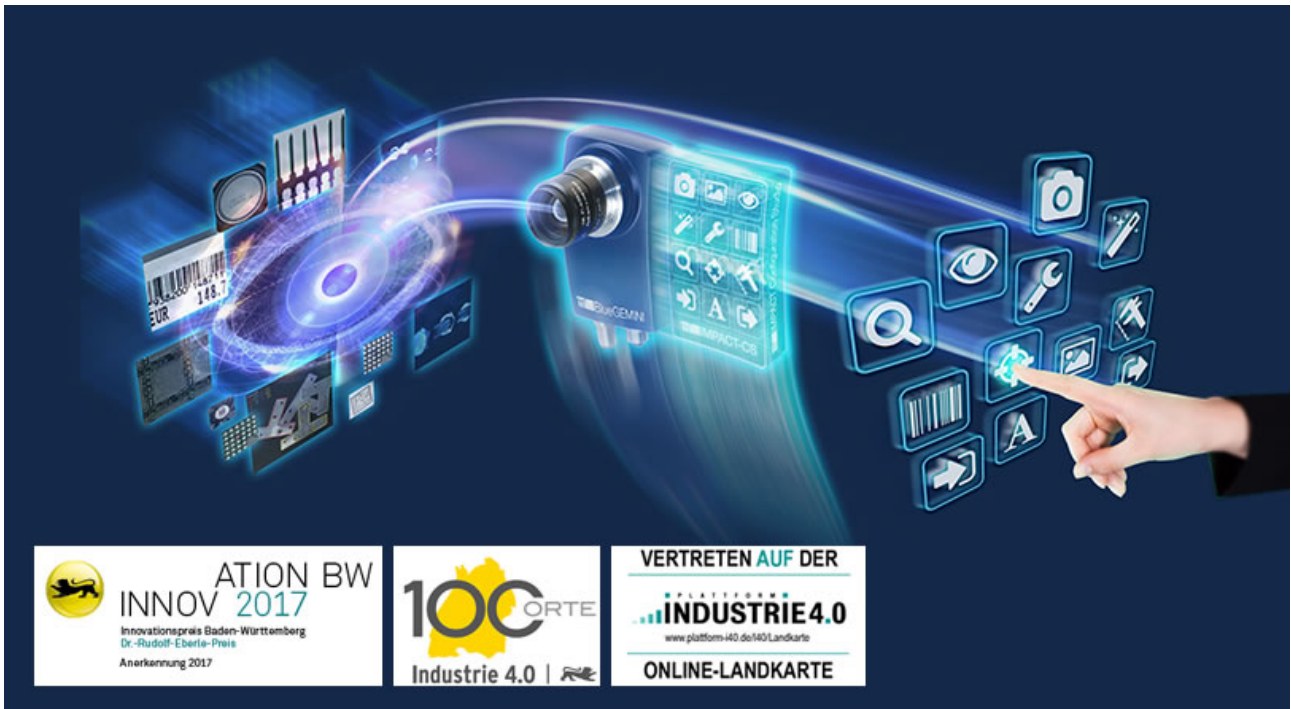
## Industrie 4.0 - Die Smart Camera in der Produktionsstraße

Despite the high number of system integrators specialized in industrial image processing which can develop and install customized **optical inspection systems**, the upcoming flood of inquiries caused by **Industry 4.0** cannot be handled. System integrators have to concentrate on lucrative orders. This situation is exacerbated by the lack of specialists.

For this reason, we integrated our expert knowledge as **Smart Vision Software** into a real **Smart Camera**. By this it is possible for SMEs to start with **optical inspection** and to solve typical tasks by themselves. Thus image processing is easy to implement and to use and according to the web-based approach you can observe each manufacturing step worldwide using smart phones, tablets, or PC.

For the first time with [Smart Camera mvBlueGEMINI](#) and [Smart Vision Software mvIMPACT Configuration Studio](#) it is possible for everyone like system developers, medical technicians, logistics specialist, process managers, etc. to create inspections without any expert knowledge and to start with industrial image processing. The training time is minimal and the user gets fast and reliable results. After this first step a company can solve more tasks quite easily using image processing.

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Fit for Industry 4.0