

**You** need. **we**Qube.



weQube is the smart camera which combines numerous features on a powerful **platform**.

Thanks to the intelligent, modular software concept weQube adjusts to your situation time and time again and is the perfect answer to your needs: Whether you wish to use weQube for image processing, for scanning, or both – simply choose the software packages you need.

Try yourself and experience how your processes are significantly simplified.  
**You need. weQube.**

# The **software concept**



weQube has many basic functions as a standard making its use even more simple and productive for you:

**Numerous demo projects** for easier configuration. Choose a template that matches your industry and application and apply the preset configurations to your application.

**Region of interest** can be customized by using different forms (e.g. circle, rectangular, polygon). Choosing relevant regions will make image processing even faster.

**Statistics module:**

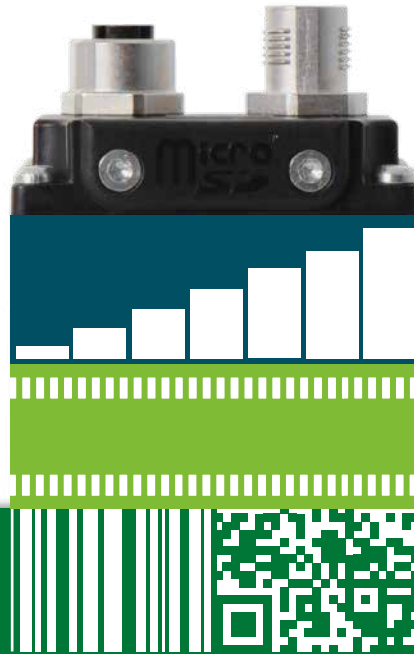
- Calculates mean values
- Maps maximum/minimum numbers at a point in time or over the course of time
- Calculates the deviation between minimum and maximum value

Simultaneously analyze any four numerical values and find out how you can further optimize the automation of your system.

**Choose your software language:**

The software is available in German, English, French, Spanish and Italian.

**weQubeBase** – the basic functions



The scan software package transforms weQube into a 1D/2D code scanner for reliable decoding of even damaged or poorly readable codes by means of integrated code reconstruction.

**1D codes:** weQubeDecode deciphers all established barcodes.

**2D codes:** DataMatrix and QR codes are read in motion and at high speed. weQubeDecode quickly and reliably reads **printed and directly marked codes**.

**Match-code comparison:**

weQubeDecode compares the current parameter content to a previously defined reference value.

**weQubeDecode** – the scan package



**Measurement module:** Determines the dimensional accuracy of distances, lengths, and angles.

**Object module:** Detects objects according to their size, counts them and sorts them by size or focal point.

**Binarization module** with various customizable image filters: checks the presence and performs threshold analyses.

**Reference image comparison:** Compares defined sections of your image to a reference image.

weQubeVision combines any number of image processing functions in one application. At high speed: A separate communication processor ensures rapid image processing even when using Industrial Ethernet.

**we**QubeVision – the image processing package

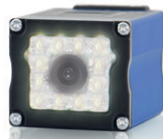


If weQube is equipped with two or more software packages it is referred to as a smart camera.

**we**Qube – the smart camera



## weQube Series 2016



**PROFI<sup>®</sup>**  
**NET** &  
**EtherNet/IP<sup>™</sup>**  
[www.wenglor.com/weQube](http://www.wenglor.com/weQube)





**Fonts:** weQubeOCR reads predefined OCR-A and OCR-B fonts over several lines in a single scanning operation.

**Teach-in:** The teach-in function provides you with the additional option of teaching in new fonts in order to adapt weQubeOCR ideally to your application.

**Communication:** weQubeOCR with Industrial Ethernet can simply be switched to either the PROFINET or the EtherNet/IP™ protocol. This function is available immediately for all weQube models with Industrial Ethernet.

**weQubeOCR** – the Character Recognition Package



# weQube with C Mount – Flexibility Meets Precision



The **new weQube housing** with C mount threaded connection is compatible with all commercially available camera lenses based on the C mount standard. The great diversity of usable optics permits precise adaptation of the image to the respective application – for flexible ranges of vision from greater distances as well. wenglor has a selection of suitable lenses for you.

Top quality for exacting demands: the weQube with C mount offers **IP67 protection**.

weQubeVision, weQubeDecode, weQubeOCR and weQube – the Smart Camera is now also available with **C mount threaded connection**.

The **protective tube** which has been specially developed for the weQube with C mount prevents erroneous mechanical adjustment of the lens.





The **protective housing** for weQube with autofocus from wenglor's InoxSens product range permits use in hygienically sensitive industrial environments. The laser-welded housing made of non-corrosive V4A stainless steel fulfills the demanding requirements specified for **IP69K protection**. The product design ensures ideal draining of liquids from the surface.

**weQube** – Applications Diversity in Stainless Steel



weQube fully adjusts to your requirements, today and tomorrow. Upgrades allow weQube to grow with you. And your common future is secured: being state-of-the-art.

With weQube you are fully equipped also for future challenges. The modular, expandable software concept allows you to remain flexible and to react confidently to new challenges.

**we**QubeUp – new software packages



The MultiCore technology combines **five high-performance processors** with a novel software concept and maximizes the performance of weQube: It enables ideal interaction of the numerous functions and summarizing several process steps.

**weQube** – **powered by MultiCore**



## Industrial Ethernet without time loss

Thanks to a separate communication processor weQube continues to operate with the same performance and speed during data communication as before.

## Optimal object detection thanks to **3D tracking**

Objects can be moved in any direction in the visible area and – weQube still detects them. Choose between particularly quick tracking in X/Y direction or highly flexible 360° tracking. In case of batch changes reproduction of the focal point is possible in addition.

## Offline remote main- tenance with **Teach<sup>+</sup>**

Teach<sup>+</sup> allows for rapid, location-independent project modifications without production downtimes. For this purpose we neither access your network directly nor interrupt running projects: From the perspective of the camera, the settings of your project are stored in a Teach<sup>+</sup> file. You send the settings to our experts who optimize them for you.





Convince yourself of the functionality and intuitive usability of an all-rounder like weQube.

Perfect **usability**



The menu-driven, graphic display enables you to make many settings on site: For example, adjust your application or view information regarding the current measured values.

**Use the set-up wizard to adjust settings directly on the display:**

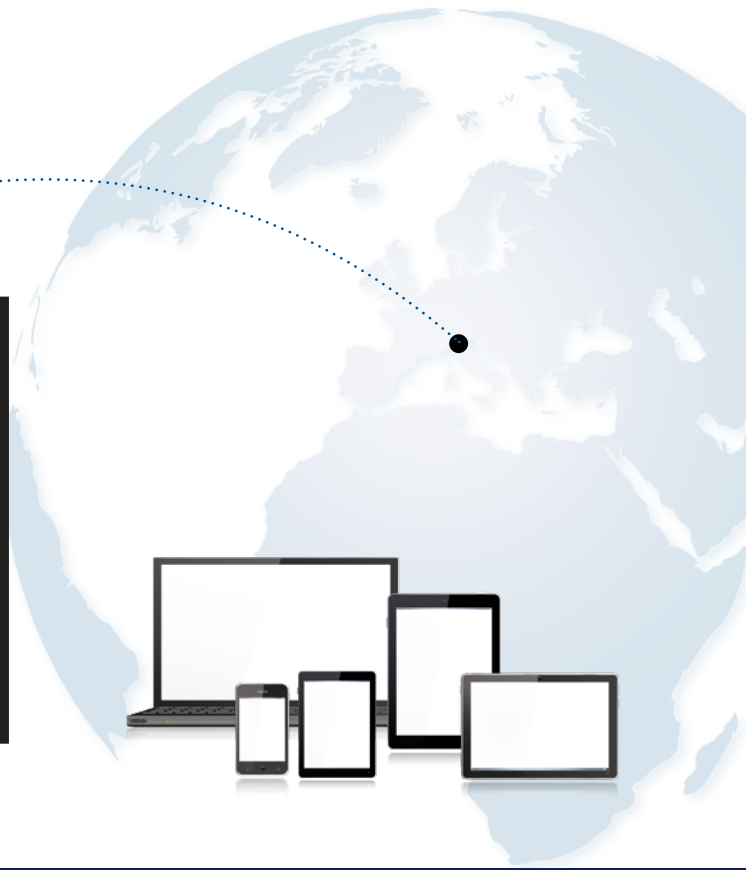
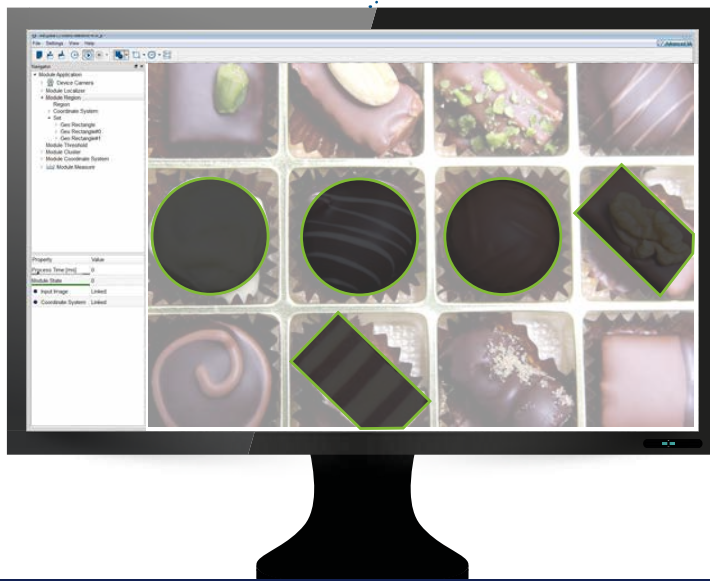
- Subsequent teaching of six freely selectable parameters
- Storing and loading sensor configurations
- Defining start projects
- Switching between projects
- Creating Teach<sup>+</sup> files at the push of a button
- Changing network settings
- Changing the password
- Making basic display settings (language, alignment, display intensity, display mode)

**View all relevant information at a glance:**

Choose the suitable display from five display templates and customize it, if required.

- Network (displaying the network status for TCP/IP, FTP, and PROFINET)
- Text (writing four lines of freely selectable, variable or static text to the display)
- Status (displaying the switching status of the six digital I/Os)
- Numeric (linking a text line and a bar diagram to parameter data via the PC software)
- Match code (comparing the current parameter content to a previously defined value)

Graphic **display**



### Control weQube from your mobile office

The web server is suitable for all formats and end devices and enables you to make numerous settings independent of your location:

- Displaying live image
- Subsequent teaching of six freely selectable parameters
- Storing and loading sensor configurations
- Defining start projects
- Switching between projects
- Creating Teach<sup>+</sup> files at the push of a button
- Changing network settings
- Changing the password

Platform-independent **web server**





## Convenient **micro SD card**

weQube stores all settings on a micro SD card. This ensures that the settings are always backed up and gives you even more flexibility.

- Duplicating your application can easily be done – by configuring it once and using it in several places!
- Switch rapidly between different settings
- Replacement of a sensor can be done in one simple step

## Replaceable **screening grid** with polarizing filter

If the screening grid becomes scratched or damaged during welding it can simply be replaced to restore clear view. The version with integrated circular polarizing filter also prevents irritating reflexions.

## Flexible **encoder input**

Even when your system is under peak load you can rely on weQube: Undeterred by changing belt and rotation speeds, an image is always taken at the right moment.

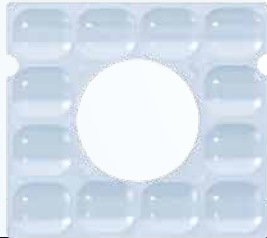
## Compact **housing**

In addition to being suitable even for systems where very little space is available, weQube is also particularly resistant due to the aluminum housing with **IP67**.



Descriptive images – this is what counts in industrial image processing. weQube combines the integrated, powerful illumination with a special optical system and thus creates ideal conditions for excellent image quality.

Excellent **image quality**



## Optical system with unique luminous field

The special optical system specifically designed for weQube evenly distributes the light of the integrated illumination and ensures optimal illumination of your application. Loss of brightness at the image edges is prevented.

## 12 powerful LEDs

(white light/red light/infrared light)

**No need for external illumination:** 12 integrated LEDs make additional light sources unnecessary in most cases.

**Use weQube even in difficult light conditions:** By controlling individual LED areas reflexions are avoided.

## Convenient autofocus

The autofocus automatically focuses your application and saves you tiresome manual focusing. An actuator and incremental encoder ensure high repeat accuracy. If required, manual focusing is also possible.

## Choose a suitable **image chip**

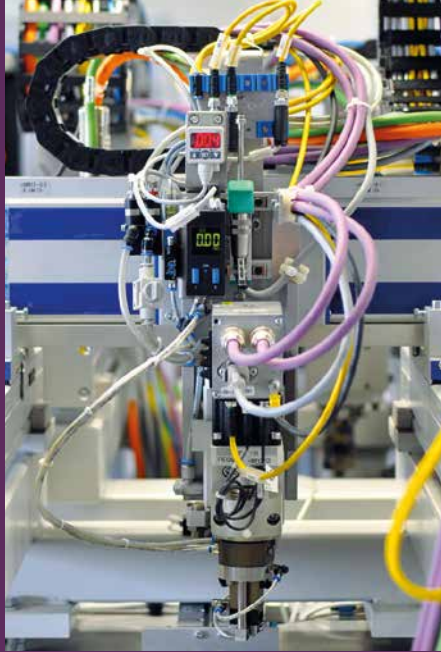
**Brilliant color image chip** for color applications

**Monochrome image chip** for standard and high-speed applications



**weQube speaks the language of your industry** and does not only deliver valuable information, but makes it usable for the entire system.

Flexible **multi communication**



Thanks to numerous interfaces weQube can easily be integrated into your system:

- Ethernet TCP/IP
- PROFINET
- RS-232
- Six freely programmable digital I/Os
- Encoder input
- In addition, weQube has an FTP server and client





wenglor is known for their good service – which naturally also applies to weQube.

A training session gives you the opportunity to get to know weQube better or to test it yourself.

Even after your purchase, you benefit from the wide range of services and accessories.

wenglor **services**



From mounting system to replacement screening grid to connection cable: A wide range of accessories is available for weQube.

- Replacement screening grid
- Screening grid with integrated polarizing filter
- Micro SD card
- Convenient mounting system
- External panel PC for live image display
- Connection cables in various lengths (M12×1, 12-pin to M12×1, 12-pin; M12×1, 8-pin to RJ45)
- Connection module (M12×1, 12-pin to trigger/illumination)
- Interface cable (M12×1, 12-pin to RS-232)
- Connection cables in various lengths (M12×1, 12-pin to open end)

Accessories



We created numerous possibilities for you to test weQube without obligation. Try it and be convinced!

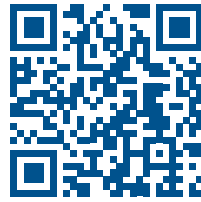
**Test the software:** You can download the weQube software to your PC free of charge and try it out. Demo projects allow you to load suitable templates for your industry and to configure them.

**Watch tutorials:** Numerous functions are clearly demonstrated step by step. You will see: configuring your weQube could not be easier!

**Find your test opportunities here:**  
[www.wenglor.com/weQube](http://www.wenglor.com/weQube)

## Tutorials and demo projects





If you would like to learn more about weQube and its possible applications and you are interested in finding out how to make your applications even more efficient, we recommend a weQube training session.

Our experts provide you with valuable insights. Use the opportunity to ask your questions and to test weQube at your leisure.

**Request your information pack now without obligation!**

Simply go to [www.wenglor.com/weQube](http://www.wenglor.com/weQube).

The **we**Qube training program



Make your system fit for the future and  
opt now for weQube.  
By scanning the QR code you will  
access the weQube portal. **Power on.**

**You** need. **we**Qube. The smart camera.



[www.wenglor.com/weQube](http://www.wenglor.com/weQube)



[www.wenglor.com](http://www.wenglor.com)