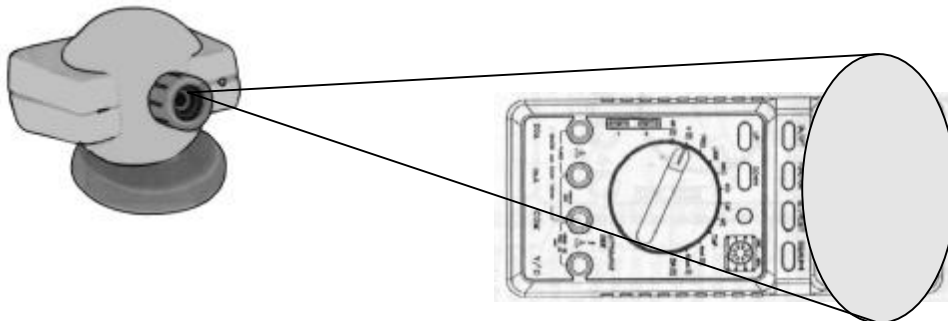


## CAM-OCR - Camera module



- **Digital processing of displayed value**
- **Display of tested multimeter on PC screen**
- **Automatic calibration of multimeters without interface**
- **Checking of measured value, process control in industry**
- **USB port for camera connection**

## Specification

<b>System requirements</b>	:	Pentium 75 or faster, Windows98 or Windows95 OSR2.1, USB
<b>Resolution (pixel)</b>	:	512 (H) x 528 (V)
<b>Video output</b>	:	USB port
<b>Light sensitivity</b>	:	automatic
<b>Angel</b>	:	51x39 degree
<b>Objective</b>	:	build-in, 3.8mm F3.0

Module „CAM - OCR“ is designed for scanning of seven-segment display through a computer provided with the digital camera. The module assembly incorporates a camera with the rotary holder retaining the camera attached to the pedestal, enabling the camera to be turned in several directions, setting in that way the optimal light conditions.

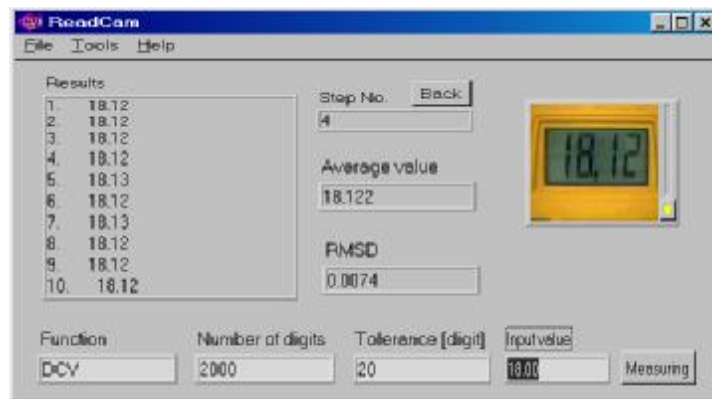


The software processes the image information, transferring it into the digital ASCII code. The digits differentiation features a high reliability of the transfer even under worsen light conditions.

The camera may be connected to the computer without a necessity of switching off. It is completely functional upon connecting to the USB-port (after

the installation of the program). The supplying is ensured also from the USB-port. The module requires no auxiliary lightning, however, under poor light conditions, an image evaluation may last longer. In the offer, there is number of programs with special character. An actual offer shall be consulted with your supplier.

One example of a particular application is the extension of the WinQbase software package with the camera scanning. WinQbase serves for the registration and calibration of measuring instruments. With the camera-scanning module, it features entirely automatic calibration of digital instruments, which have no option to be connected to the computer. During the calibration process, the program proceeds similarly as if having been connected to the computer. The camera-scanned image is digitally processed and transferred into a digital information. The program is determined for seven-segment display. A set of measurements in each check point is done, then being statistically evaluated and deviation and uncertainty of measurement is stated. This solution benefits from a significant reducing of work quantity for calibration as well as from better repetition and objectivity of measuring. The system entirely eliminates influence of the operator on the uncertainty calibration.



Another example is the program module "ReadCam" intended for processing of measuring results without support of WinQbase. Values taken from the display are written directly into the file "\*.xls", which is better for further processing in the Excel software.

The program is suitable for the checking of measuring instruments because it enables an elaboration of multiple measurements, calculation of the value dispersion as well as measurement uncertainty.