

Miniaturized Camera Head I

USB Visual Inspection System

WK3101

Color/RGB Bayer Pattern

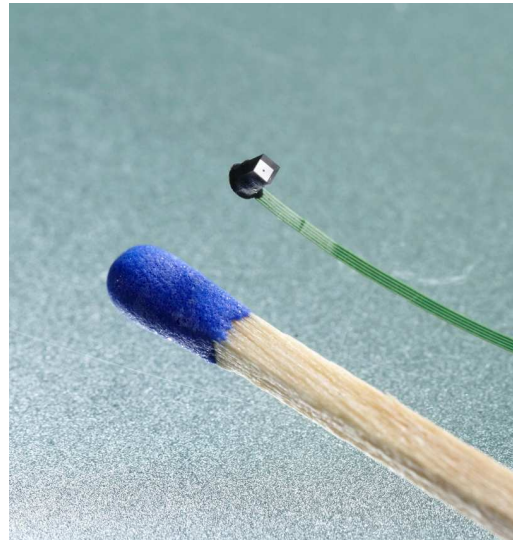


The miniaturized camera head WK3101 for visual inspection systems consists of a highly miniaturized image sensor chip combined with special lenses. Control and data transfer between head and camera electronics (CCU-USB) is realized by LVDS interface via a bonded, highly flexible cable. The CCU can be connected to a PC via USB2.0 in order to store and display captured images.

Parameters

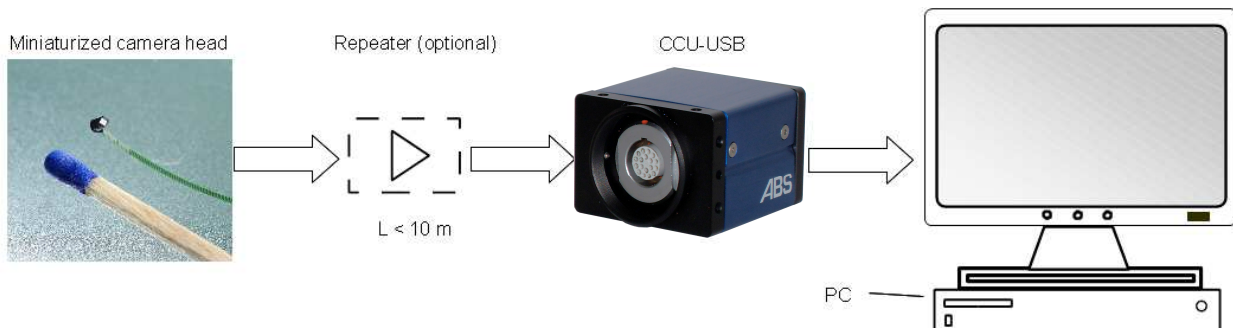
- Sensor CMOS, RGB Bayer pattern
- Resolution 62,5k; 250 × 250 pixel
- Frame rate 44 fps
- Shutter Rolling shutter
- Dynamic range 42 dB
- Sensor size 1,0 × 1,0 × 1,5 mm³ (incl. lens)
- Lens
 - Viewing angle approx. 80°
 - Aperture 3,8
 - Object distance approx. 1 mm to 50 mm
- Data output 10 Bit digital LVDS
- Power voltage 1,8 V
- Power consumption approx. 5 mW
- Pads 4 (VDD, VSS, data+, data-)
- Temperature range +0°C to +70°C
- Cable connection Flex cable, width 700 µm, thickness 65 µm, possible bending radius 100 µm, typical length 0,56 m, maximum length 2,5 m, with repeater till 10 m possible

Miniaturized Camera Head



Application Fields

The small size makes the miniaturized camera head well suited to inspection tasks on places extremely difficult to access (e.g. hollow spaces, small diameter bore holes, or overlaps). By an appropriate design the application of the module was extended to medical examinations. We are ready to adapt the camera head to your special tasks and application fields by request.



¹ CCU: Camera Control Unit
Design and specification may change without notice