



## WELD FLOW INSPECTION SYSTEM

➤ **VALUE**

➤ **VERSATILITY**

➤ **PERFORMANCE**



**WFIS-65T**



## DESCRIPTION:

BANBROS offers you the most advance system of weld Flow inspection with specially design high resolution microscope and USB digital microscopic camera to view and instantly capture a photograph and measure exact weld penetration depth in all type of weld sample with the help of user-friendly software. The system can be used to measure all dimensional measurement (2D) like length distance radius diameter etc.

## FEATURES:

- **Operating System:** Support to windows10.
- **Picture Element:** High-resolution CMOS chip.
- **Output:** USB is used to adapt with pc.
- **Power:** It is freely plugged and unplugged with no extra power.

### 1) Dimensional Measurement:

- a) Line
- b) Length (Linear, Horizontal, Vertical)
- c) Angle (two-line angle, three-line angle)
- d) Distance (two point)
- e) Radius (three point)
- f) Diameter (three point)

### 2) Calibration: This tool is used for calibrating through calibration scale.

### 3) Report:

- a) PDF & M.S. Excel
- b) Printout with Processed imaged and results.

## TECHNICAL SPECIFICATIONS:

| Model No.  | WFIS-65T                      |
|--|-------------------------------|
| Magnification Range  | 6.5X to 65X                   |
| Objectives Range if Zoom Magnification   | 0.65X-6.5X                    |
| Eyepieces Field is wide and clear  | 10X (field size: $\Phi$ 20mm) |
| Illumination   | LED Ring Light                |
| Power Supply is out of the base of instrument  |                               |
| The mode of illumination selection and brightness adjusting are very easy, has three modes: transmitted light, reflected light and mixed light illumination. |                               |



#### HI-DEFINITION INDUSTRIAL DIGITAL USB MICROSCOPIC CAMERA:

It looks like an eyepiece. It can be easily inserted into eyepiece tube of microscope. The Digital Micro- Image Displays Immediately on computer or notebook PC. It is used in the field of image demonstration and analysis/application.

**BMEX-Series** can be easily inserted into eyepiece tube of microscope. The Digital Micro-Image Displays Immediately on computer or notebook PC. This camera ranges is an ultra-high performance CMOS camera and it adopts ultra-high performance CMOS sensor as the image-picking device. USB2.0 is used as the data transfer interface. The camera hardware resolutions range from 2M.P, 5M.P, 12M.P and comes with the Integrated zinc aluminium alloy compact housing. It comes with advanced video & image processing application ultracam; providing Windows/Linux/OSX multiple platform SDK; Native C/C++, C#/VB.NET, DirectShow, Twain Control API. It can be widely used in bright-field light environment and microscope image capture and with moderate frame rate.



It can provide support for detail image demonstration and analysis/application, including following function:

- Take Photo and Save Picture into Computer
- Take Video and Save Video into Computer



**TECHNICAL SPECIFICATIONS:**

| Parameters                   | BMEX-2F   | BMEX-5F   | BMEX-12F                             |
|------------------------------|---|---|--------------------------------------|
| <b>Sensor</b>                | CMOS 1/2.9 inch   | CMOS 1/2.8 inch   | CMOS 1/2.3 inch                      |
| <b>Pixels</b>                | 1920 x 1080 pixels, 2.0 MP  | 2560 x 1920 pixels, 5.0 MP  | 4000 x 3000 pixels, 12.0 MP          |
| <b>Scan Mode</b>             | Progressive, rolling shutter  | Progressive, rolling shutter  | Progressive, rolling shutter         |
| <b>Pixel Size</b>            | 2.8 $\mu$ m x 2.8 $\mu$ m   | 2.0 $\mu$ m x 2.0 $\mu$ m   | 1.33 $\mu$ m x 1.33 $\mu$ m          |
| <b>Max Fps</b>               | Up to 30 FPS (1920x 1080 pixels)  | Up to 30 FPS (2560 x 1920 pixels)<br>Up to 50 FPS(1600 x 1200 pixels) | Up to 15 FPS (4000x 3000 pixels)     |
| <b>Filter</b>                | RGB   | RGB   | RGB                                  |
| <b>Mount</b>                 | C-mount   | C-mount   | C-mount                              |
| <b>Grayscale Conversion</b>  | 8 bits  | 8 bits  | 8 bits                               |
| <b>Color Depth</b>           | 24 bits   | 24 bits   | 24 bits                              |
| <b>Exposure</b>              | Automatic or manual, from 1 ms to 2s  | Automatic or manual, from 1 ms to 2s                                  | Automatic or manual, from 1 ms to 2s |
| <b>White Balance</b>         | Automatic/manual  | Automatic/manual  | Automatic/manual                     |
| <b>Dynamic Range</b>         | 72 db   | 72 db   | 60 db                                |
| <b>Sensitivity V/Lux-Sec</b> | (at 550 nm) 0.51  | (at 550 nm) 2.0   | (at 550 nm) 1.5                      |
| <b>Data Interface</b>        | USB 2.0 at 480 Mb/s   | USB 2.0 at 480 Mb/s   | USB 2.0 at 480 Mb/s                  |
| <b>Operation Humidity</b>    | 10-85 % humidity  | 10-85 % humidity  | 10-85 % humidity                     |
| <b>Operating Temperature</b> | 0 to 60°C   | 0 to 60°C   | 0 to 60°C                            |
| <b>Supplied With</b>         | 0.45x objective with C-mount, USB 2.0 cable, 30 and 30.5 mm adapters for stereo microscopes, 76x 24 mm calibration slide, CD ROM with Image Focus Plus software, carton box |   |                                      |
| <b>Software</b>              | Windows 7 and higher (32 and 64 bit configurations). A Mac OS software version is also supplied   |   |                                      |

\* Due to continuous product development, Image & specification can be upgrade.