WANCE®

Do Our Best for Your Test

Video extensometer

The ONE series video extensometers are smart and easy-to-use devices for routine testing in both industrial and R&D environments.

The compact housing includes a monochromatic LED bar light and can be mounted directly to a testing machine frame, creating a lean test setup, or fixed to a tripod using standard screw threads.

The lens is easily accessible and can be changed in a short time to equip the ONE measuring device for diverse applications.

Features

- An all-in-one solution
- Stackable
- Lens and LED light included
- Automatic light ON/OFF
- Axial or Transversal Alpha software license included
- One measurement grid
- All cabling included
- Easy to mount

Video extensometer series

- **ONE**: normal video extensometer
- **ROD**: specifically designed for rebar
- **HT**: specifically designed for high temperature test

ONE series

Camera / Resolution	One camera	Two cameras	Three cameras
2.3MPx resolution	ONE1-M2	ONE2-M2	ONE3-M2
5MPx resolution	ONE1-M5	ONE2-M5	ONE3-M5
9MPx resolution	ONE1-M9	ONE2-M9	ONE3-M9

Mode

Single mode: the most common setup. Multiple single cameras can be used simultaneously.

Joined Mode: Identical FoVs where a point can travel between cameras.

Dual FoV Mode: An uncommon setup with different resolutions.

In cases when the field of view of one camera is less than 210 mm, it is not mechanically possible to merge the fields of view. That means the JOINED mode is not applicable.
However, this setup can still be used for multiple standalone views calibrated into one coordinate system. The typical use is measurement of long specimens with a relatively small extension.

ONE-M2 specifications

- Single camera resolution: 2.3 MPx
- 1/1.2" sensor size
- CMOS sensor
- 5.86 um pixel size
- USB 3.0 interface
- 43 Hz at full resolution
- C-Mount lens mounting
- S-Series lens recommended

ISO9513	Field of view (mm)						Working distance (mm)				
	ONE1-M2		ONE2-M2		ONE3-M2		Lens focal length				
	Height	Width	Height	Width	Height	Width	12mm	16mm	25mm	35mm	50mm
Class 0.5	110	70	2x110	70	3x110	70	-	134	237	322	430
Class 1	190	120	360	120	530	120	176	253	416	571	785
Class 2	380	238	720	238	1060	238	379	523	841	1155	1630

Separate Fields of View; for Joined mode check ONE-M9

Additional lighting may be needed

ONE-M5 specifications

- Single camera resolution: 5 MPx
- 2/3" sensor size
- CMOS sensor
- 3.45 um pixel size
- USB 3.0 interface
- 75 Hz at full resolution
- C-Mount lens mounting
- S-Series lens recommended

ISO9513	Field of view (mm)						Working distance (mm)				
	ONE1-M5		ONE2-M5		ONE3-M5		Lens focal length				
	Height	Width	Height	Width	Height	Width	12mm	16mm	25mm	35mm	50mm
Class 0.5	130	109	2x130	109	3x130	109	156	213	357	520	710
Class 1	260	218	520	218	760	218	335	459	737	1054	1480
Class 2	520	435	1040	435	1500	435	693	950	1498	2123	3020

Separate Fields of View; for Joined mode check ONE-M9

Additional lighting may be needed

ONE-M9 specifications

- Single camera resolution: 9 MPx
- 1" sensor size
- CMOS sensor
- 3.45 um pixel size
- USB 3.0 interface
- 32 Hz at full resolution
- C-Mount lens mounting
- H-Series lens recommended

ISO9513	Field of view (mm)						Working distance (mm)				
	ONE1-M9		ONE2-M9		ONE3-M9		Lens focal length				
	Height	Width	Height	Width	Height	Width	12mm	16mm	25mm	35mm	50mm
Class 0.5	220	116	420	116	620	116	169	233	378	519	720
Class 1	440	232	840	232	1240	232	364	494	758	1063	1485
Class 2	880	464	1680	464	2480	464	748	1017	1519	2152	3055

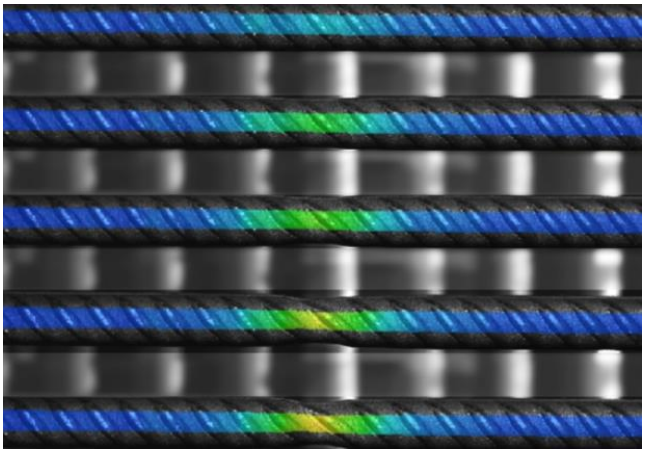
Additional lighting may be needed

ROD series

ROD is a rugged and easy-to-use video extensometer optimized for tensile testing of reinforcing steel.
The unique ITT functionality of the Alpha software allows for measurement of specimen with an oxide or rust layer, falling off significantly, making the use of standard video extensometers almost impossible.
The ROD measuring system is aimed at being as simple and precise as possible in terms of minimal requirements for specimen preparation and calibration.

Specifications

- 2 × 2.3 MPx industrial cameras
- Lighting: 500 mm LED light
- Field of view: 550 × 100 mm
- Sampling rate: > 40 Hz
- USB relay for light control
- Weight: approx. 3.5 kg
- Dimensions: 560 × 210 × 90 mm
- Power supply: 24 V 1A – 500 mm
- Dustproof housing
- Fixed working distance (approx. 560 mm)
- Length of USB3 cable: 4.5 m outside the camera box
- Connection: 2 × USB 3.0; 1 × USB 2.0; RJ45
- Alpha software equipped with ITT (Intelligent Tensile Testing feature)
- Complies with ISO 9513: Class 1
- Complies with ASTM E83-10a B1 for L0 > 25 mm



HT series

HT is a high-temperature video extensometer. It uses advanced digital image correlation for precise analysis of thermomechanical and thermophysical properties.
The HT hardware device is presently the most Xsighting device for high-temperature strain measurement up to 1400 °C. HT combines high-precision measurement with a userfriendly graphic interface so that the user can fully focus on the experiment during uniaxial or biaxial tensile, compression, and shear testing.
HT is suited not only for measurement using furnaces but for any application which requires high-precision reading over a small field of view.

Specification

- Field of View: 47 × 41 mm
- Resolution ISO 9513: Class 0.5
- ASTME 83: Class A (GL > 15 mm)
- Gauge Length: Selectable single or multiple GLs
- Sampling rate: 75 – 200 Hz
- Axial and radial neck detection
- Lighting: Auto-switching monochromatic light

Shenzhen Wance Testing Machine Co., Ltd.
Bldg.3, Yinjin Technology Industrial Park,
Fengjing South Road, Guangming, Shenzhen 518107, China
Tel: +86-755-23057280
Email: sales@wance.net.cn www.wance.net